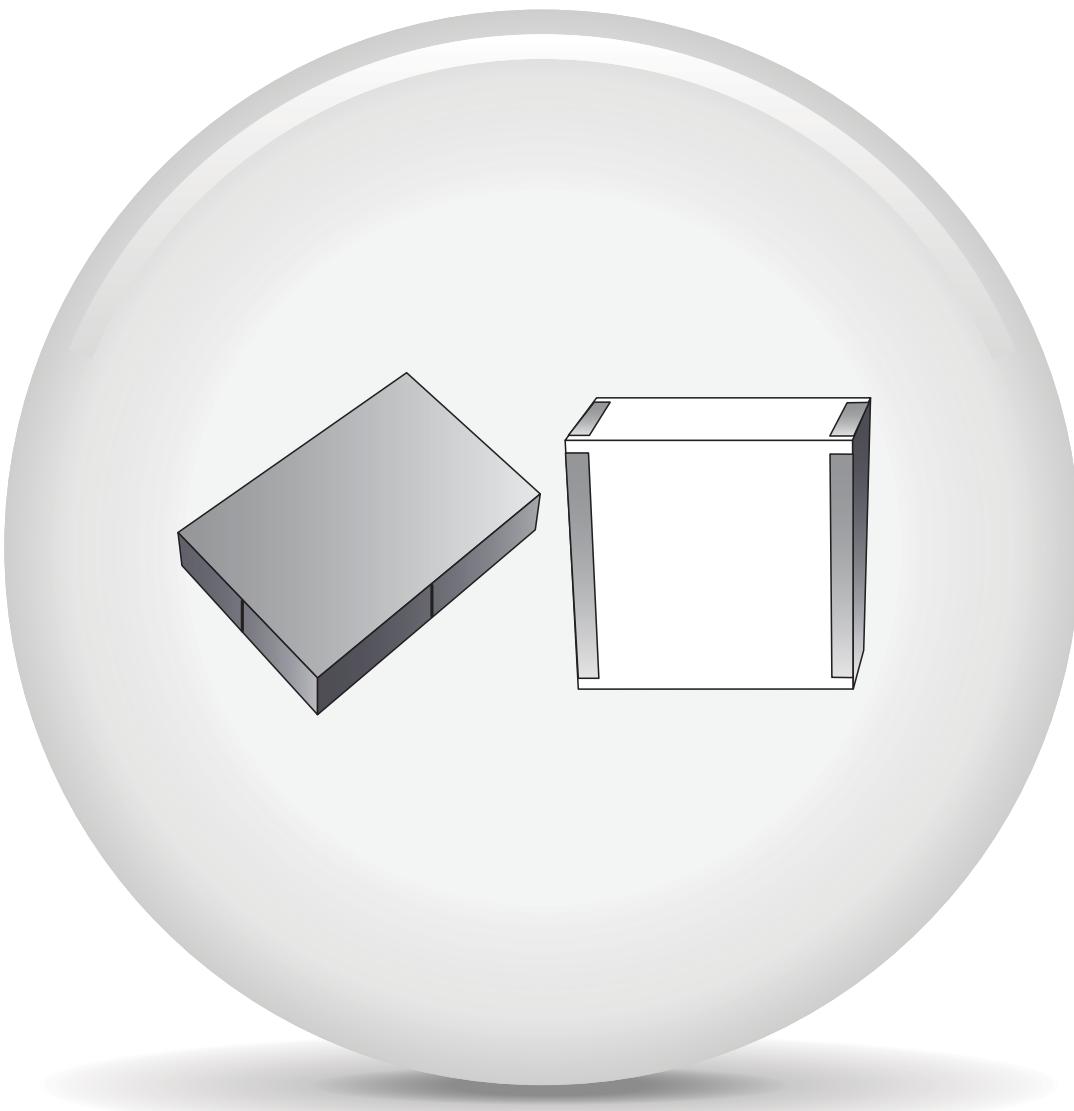


Film Surface Mount Capacitors

General Purpose, High Stability and
AC Line EMI Suppression

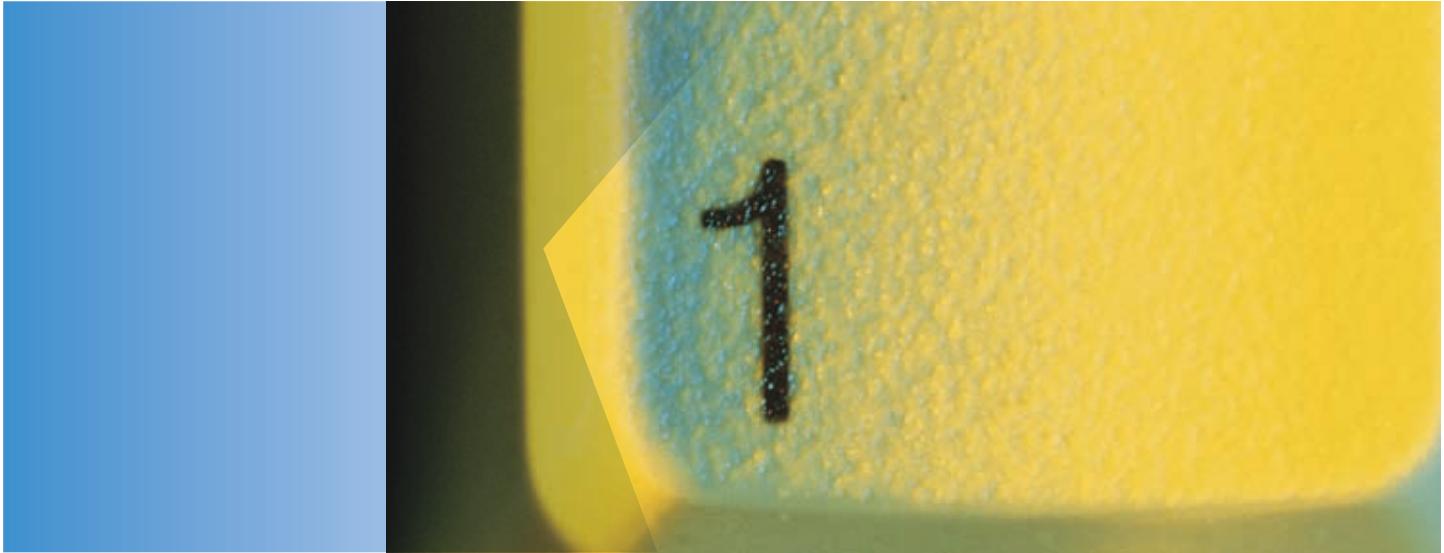


One world. One KEMET.

The Capacitance Company
KEMET
CHARGED.[®]

Table of Contents

	Page
Why Choose KEMET	3
Metallized Polyester Dielectric, 5% Temperature Stability	
F161 Series Encapsulated Stacked, Size 2220 – 6560, 50 – 400 VDC	9
MDC Series Dual In-Line, 50 – 630 VDC, High Current	20
MDS Series Dual In-Line Low Profile, 50 – 630 VDC, High Current.....	30
JSN Series Unencapsulated Stack Chip with Flat Terminations, 100 – 250 VDC, for DC Link.....	40
Metallized PEN Dielectric, 5% Temperature Stability, Increased Solder Temperature	
LDE Series Unencapsulated Stacked Chip, 1206 – 6054, 50 – 1,000 VDC	47
GMC Series Encapsulated, Size 2220 – 6560, 50 – 630 VDC	62
GPC Series Encapsulated Double Metallized, Size 2824 – 6560, 63 – 1,000 VDC.....	72
GMW Series Unencapsulated Winding, Size 2220, 63 – 630 VDC	80
Metallized PPS Dielectric, Stable High Temperature	
LDB Series Unencapsulated Winding, Size 1206 – 1812, 16 & 50 VDC	87
SMC Series Encapsulated, Size 2220 – 6560, 50 – 400 VDC.....	95
SPC Series Encapsulated Double Metallized, Size 2824 – 6560, 100 – 630 VDC	105
SMW Series Unencapsulated Winding, Size 2220 – 2824, 50 – 400 VDC	112
AC Line EMI Suppression Y2 Capacitors	
SMP253 Series Metallized Impregnated Paper, 250 VAC.....	120
Packaging Information	
Carrier Taping & Packaging for GMC, GPC, SMC & SPC (IEC 60286–2)	126
<i>Packaging Information for F161, MDC, MDS, JSN, LDE, GMW, LDB, SMW, and SMP253 is product-specific and included within the appropriate product sections.</i>	
KEMET Corporation Sales Offices	
128	
Other KEMET Resources	
129	



One world. One source. One KEMET.

No bouncing from supplier to supplier to find what you need. No multiple web sites and phone calls to get answers.

When you partner with KEMET, our entire global organization seamlessly provides you with the coordinated action and service you need. We're your single, integrated source for capacitance solutions worldwide, offering 95% of possible dielectric solutions, to cover practically any application. With new, innovative products year after year after year. Global availability. Full design collaboration, with fast custom design and prototyping to give your new products a competitive edge. Plus consistent quality, reliability and on-time delivery.

All from one company that's easy to work with and totally dedicated to your success. For anything to do with capacitance, call *The Capacitance Company* – KEMET.



Looking for a hassle-free source for 95% of possible dielectric solutions?

KEMET is the place for one-stop dielectric shopping. We offer our customers the broadest selection of capacitor technologies in the industry, including tantalum, ceramic, aluminum, electrolytic, film and paper.

But the range of products is only the beginning. You simply won't find an electronic components manufacturer more determined to find new technological solutions to customer problems, or more committed to product quality and on-time delivery – in every case, lowering your total cost of ownership as much as we possibly can. It's how we've helped customers succeed for more than 90 years. And it's how we're helping them succeed today.



We're everywhere you need us to be.

AMERICA

Canada
Mexico
USA

EMEA

Bulgaria
Finland
France
Germany
Italy
Portugal
Sweden
Switzerland
United Kingdom

ASIA-PACIFIC

China
Hong Kong
India
Indonesia
Japan
Malaysia
Singapore
Taiwan

The next time you board an airplane, boot up your computer or read about a breakthrough medical device, a piece of our technology is likely involved. KEMET customers include nearly all of the world's major electronics original equipment manufacturers, manufacturing services companies and electronics distributors. High Reliability versions of our capacitors are even in outer space, part of every important military and aerospace effort of the past 60 years, from the first Telstar satellite and Apollo 11 to the Patriot missile, International Space Station and Mars Pathfinder.

Our sales offices can't be quite as ubiquitous as our products, but we do pride ourselves on being where you need us. This map shows you our sales offices around the world.

As you can see, we're not only easy to work with, we're easy to find. And we're more than ready to be your single source capacitance solutions supplier.

One world. One source. One KEMET.

One world. One KEMET



Why The Capacitance Company is also the “Easy-To-Buy-From” company.

When you choose KEMET, you'll enjoy a level of responsiveness you just won't get from any other component manufacturer. You simply won't find an electronic components manufacturer more passionate about customer service. Our innovative service offerings and superior localized support are known throughout the industry, powered by our global, customer-focused sales organization and worldwide logistics capabilities. We're 100% committed to serving any customer, anywhere, and meeting customer needs when they need to be met.

Whether you need rush samples, technical assistance, in-person consultations or accelerated custom design, design collaboration and prototype services, we have a solution. If it's anything to do with capacitance, we can help – and help fast.



Working to make a better world.

At KEMET, we're proud to work with customers to develop products that truly make the world a better, safer, more connected place to live – from hand-held devices to automotive systems to the greenest energy technology.

As a company, KEMET is dedicated to economically, environmentally and socially sustainable development. We've adopted the Electronic Industry Code of Conduct (EICC), addressing all aspects of corporate responsibility. All of our commercial-grade products are available in RoHS-compliant versions with Pb-free terminations. Our manufacturing facilities have won numerous environmental excellence awards and recognitions. And our supply chain is certified to be sourced from areas that are neither environmentally protected nor under conflict.

After all, we believe that doing the right thing is in everyone's interest.



Which capacitor is right for you?

As The Capacitance Company, we make over 95% of possible dielectric solutions – the broadest selection of capacitor technologies in the industry. By offering a wide variety of dielectrics, dimensions, voltages, temperature characteristics and terminations, KEMET capacitors satisfy an expansive range of customer requirements and applications.

In fact, if the capacitor you need hasn't been invented, it's only because you haven't asked. We can quickly develop custom products and carry out early-stage manufacturing through our accelerated collaboration services. Available through our global innovation and manufacturing centers around the world, accelerated collaboration brings together the necessary people, equipment and facilities together to get the job done, on time and in budget.

Of course, when you're under pressure to design smaller and smaller products with greater and greater functionality, there's no time for the traditional back-and-forth with your suppliers. With KEMET, you get direct contact to the engineers and other professionals who can help you successfully solve your design problems, and in record time. We deal personally with customers to ascertain the new part types needed for their next-generation products. In many cases, we can go from start to samples in only four months.

We've helped some of the world's most prominent electronics companies slash time to market and gain significant windows of competitive advantage. We can do the same for you, too.

Overview

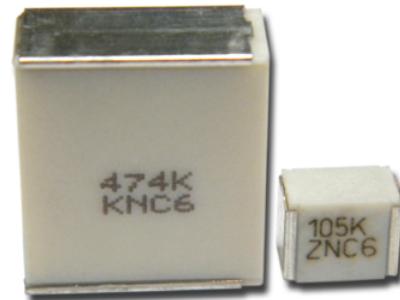
KEMET's F161 Series polyester (PET) film capacitor for surface mounting is encapsulated in self-extinguishing material meeting the requirements of UL 94 V-0.

Applications

Typical applications include bypassing and signal coupling. F161 is a general purpose series designed for the highest reliability.

Benefits

- Rated voltage: 50 – 400 VDC
- Rated voltage: 30 – 200 VAC
- Capacitance range: 0.01 – 12 µF
- EIA size: 2220 – 6560
- Capacitance tolerance: ±5%, ±10%, other tolerances on request
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



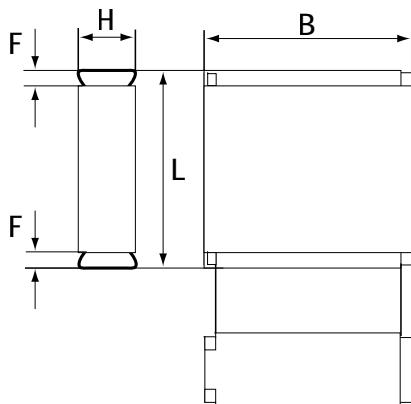
Part Number System

F	161	P	L	102	K	050	V
Capacitor Class	Series	Chip Size	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film Metallized Polyester Stacked Technology	P = 2220 S = 2824 W = 4036 Y = 5045 Z = 6560		See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5 K = ±10% Other tolerances on request	050 = 50 063 = 63 100 = 100 250 = 250 400 = 400	See Ordering Options Table

Ordering Options Table

Chip Size (EIA)	Packaging Type	Packaging Code
2220	Standard Packaging Options	
	Tape & Reel (Standard Reel)	V
	Bulk (Bag)	A
2824	Standard Packaging Options	
	Tape & Reel (Standard Reel)	V
	Bulk (Bag)	A
4036	Standard Packaging Options	
	Tape & Reel (Standard Reel)	V
	Bulk (Bag)	A
	Other Packaging Options	
	Tape & Reel (Vertical Orientation Standard Reel)	Y
5045	Standard Packaging Options	
	Tape & Reel (Standard Reel)	V
	Bulk (Bag)	A
	Other Packaging Options	
	Tape & Reel (Vertical Orientation Standard Reel)	Y
6560	Standard Packaging Options	
	Tape & Reel (Standard Reel)	V
	Bulk (Bag)	A
	Other Packaging Options	
	Tape & Reel (Vertical Orientation Standard Reel)	Y

Dimensions – Millimeters



Size Code	Chip Size (EIA)	B		H		L		F	
		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
PL	2220	5.0	+/-0.2	2.5	+/-0.2	5.7	+/-0.2	0.5	Nominal
PP	2220	5.0	+/-0.2	3.0	+/-0.2	5.7	+/-0.2	0.5	Nominal
PU	2220	5.0	+/-0.2	4.0	+/-0.2	5.7	+/-0.2	0.5	Nominal
SG	2824	6.0	+/-0.2	2.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
SL	2824	6.0	+/-0.2	3.0	+/-0.2	7.3	+/-0.2	0.5	Nominal
SP	2824	6.0	+/-0.2	3.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
ST	2824	6.0	+/-0.2	4.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
WP	4036	9.1	+/-0.2	5.5	+/-0.2	10.2	+/-0.2	0.5	Nominal
YR	5045	11.5	+/-0.2	6.5	+/-0.2	12.7	+/-0.2	0.5	Nominal
ZS	6560	15	+/-0.2	7.0	+/-0.2	16.5	+/-0.2	0.5	Nominal

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.

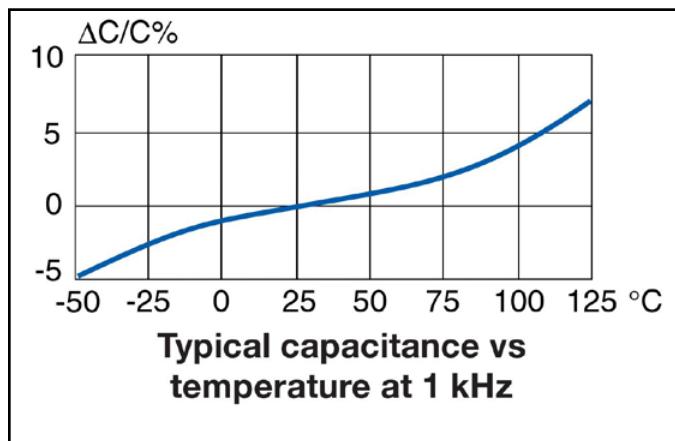


RoHS Compliant

Performance Characteristics

Rated Voltage (VDC)	50	63	100	250	400
Rated Voltage (VAC)	30	40	63	160	200
Capacitance Range (μF)	0.01 – 12	0.01 – 4.7	0.01 – 3.3	0.01 – 1	0.022 – 0.47
Chip Size (EIA)	2220 – 6560				
Capacitance Tolerance	$\pm 5\%$, $\pm 10\%$, other tolerances on request				
Category Temperature Range	-55°C to +125°C				
Rated Temperature	+85°C				
Voltage Derating	The rated voltage is decreased with 1.25%/°C from +85°C				
Climatic Category	55/125/56				
Test Voltage	1.6 $\times V_R$, 60 seconds				
Insulation Resistance	Measured at +20°C, Charging Time 1 Minute				
	Minimum Values Between Terminals				
	Charging Voltage	$C \leq 0.33 \mu\text{F}$		$C > 0.33 \mu\text{F}$	
	10 V for $V_R \leq 100$	1,000 M Ω		400 M $\Omega \cdot \mu\text{F}$	
Dissipation Factor	100 V for $V_R > 100$	1,000 M Ω		400 M $\Omega \cdot \mu\text{F}$	
	Maximum Values at +23°C				
		$C \leq 0.1 \mu\text{F}$	$0.1 < C < 1 \mu\text{F}$	$1 \leq C \leq 10 \mu\text{F}$	$C > 10 \mu\text{F}$
	1 kHz	0.8%	0.8%	0.8%	0.8%
Maximum Pulse Rise Time	10 kHz	1.2%	1.2%	1.5%	3.0%
	100 kHz	2.5%	3.0%		
	The capacitors can withstand an unlimited number of pulses with a dV/dt according to Table below.				
Voltage Range	50 VDC	63 VDC	100 VDC	250 VDC	400 VDC
	dV/dt (V/ μs)	40	40	50	150

Capacitance vs. Temperature



Dissipation Factor vs. Temperature

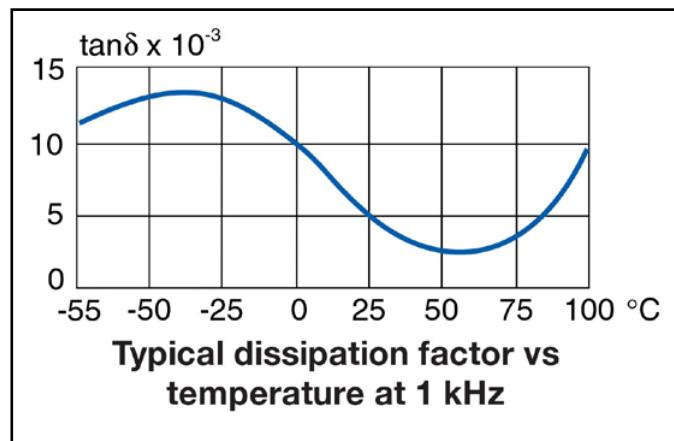


Table 1 – Ratings & Part Number Reference

VDC	VAC	Capacitance Value (μF)	Size Code	Dimensions in mm			Chip Size	dV/dt (V/ μs)	Part Number	Remark
				B	H	L				
50	30	0.01	J31	5.0	2.5	40	5.7	2220	F161PL103(1)050(2)	pending
50	30	0.012	J31	5.0	2.5	40	5.7	2220	F161PL123(1)050(2)	pending
50	30	0.015	J31	5.0	2.5	40	5.7	2220	F161PL153(1)050(2)	pending
50	30	0.018	J31	5.0	2.5	40	5.7	2220	F161PL183(1)050(2)	pending
50	30	0.022	J31	5.0	2.5	40	5.7	2220	F161PL223(1)050(2)	pending
50	30	0.027	J31	5.0	2.5	40	5.7	2220	F161PL273(1)050(2)	pending
50	30	0.033	J31	5.0	2.5	40	5.7	2220	F161PL333(1)050(2)	pending
50	30	0.039	J31	5.0	2.5	40	5.7	2220	F161PL393(1)050(2)	pending
50	30	0.047	J31	5.0	2.5	40	5.7	2220	F161PL473(1)050(2)	pending
50	30	0.056	J31	5.0	2.5	40	5.7	2220	F161PL563(1)050(2)	pending
50	30	0.068	J31	5.0	2.5	40	5.7	2220	F161PL683(1)050(2)	pending
50	30	0.082	J31	5.0	2.5	40	5.7	2220	F161PL823(1)050(2)	pending
50	30	0.1	J31	5.0	2.5	40	5.7	2220	F161PL104(1)050(2)	pending
50	30	0.12	J33	5.0	3.0	40	5.7	2220	F161PP124(1)050(2)	pending
50	30	0.15	J33	5.0	3.0	40	5.7	2220	F161PP154(1)050(2)	pending
50	30	0.18	J35	5.0	4.0	40	5.7	2220	F161PU184(1)050(2)	pending
50	30	0.22	J35	5.0	4.0	40	5.7	2220	F161PU224(1)050(2)	pending
50	30	0.01	K31	6.0	2.5	40	7.3	2824	F161SG103(1)050(2)	pending
50	30	0.012	K31	6.0	2.5	40	7.3	2824	F161SG123(1)050(2)	pending
50	30	0.015	K31	6.0	2.5	40	7.3	2824	F161SG153(1)050(2)	pending
50	30	0.018	K31	6.0	2.5	40	7.3	2824	F161SG183(1)050(2)	pending
50	30	0.022	K31	6.0	2.5	40	7.3	2824	F161SG223(1)050(2)	pending
50	30	0.027	K31	6.0	2.5	40	7.3	2824	F161SG273(1)050(2)	pending
50	30	0.033	K31	6.0	2.5	40	7.3	2824	F161SG333(1)050(2)	pending
50	30	0.039	K31	6.0	2.5	40	7.3	2824	F161SG393(1)050(2)	pending
50	30	0.047	K31	6.0	2.5	40	7.3	2824	F161SG473(1)050(2)	pending
50	30	0.056	K31	6.0	2.5	40	7.3	2824	F161SG563(1)050(2)	pending
50	30	0.068	K31	6.0	2.5	40	7.3	2824	F161SG683(1)050(2)	pending
50	30	0.082	K31	6.0	2.5	40	7.3	2824	F161SG823(1)050(2)	pending
50	30	0.1	K31	6.0	2.5	40	7.3	2824	F161SG104(1)050(2)	pending
50	30	0.12	K31	6.0	2.5	40	7.3	2824	F161SG124(1)050(2)	pending
50	30	0.15	K31	6.0	2.5	40	7.3	2824	F161SG154(1)050(2)	pending
50	30	0.18	K33	6.0	3.0	40	7.3	2824	F161SL184(1)050(2)	pending
50	30	0.22	K33	6.0	3.0	40	7.3	2824	F161SL224(1)050(2)	pending
50	30	0.27	K35	6.0	3.5	40	7.3	2824	F161SP274(1)050(2)	pending
50	30	0.33	K35	6.0	3.5	40	7.3	2824	F161SP334(1)050(2)	pending
50	30	0.39	K35	6.0	3.5	40	7.3	2824	F161SP394(1)050(2)	pending
50	30	0.47	K35	6.0	3.5	40	7.3	2824	F161SP474(1)050(2)	pending
50	30	0.56	K37	6.0	4.5	40	7.3	2824	F161ST564(1)050(2)	pending
50	30	0.68	K37	6.0	4.5	40	7.3	2824	F161ST684(1)050(2)	pending
50	30	0.82	K37	6.0	4.5	40	7.3	2824	F161ST824(1)050(2)	pending
50	30	1	K37	6.0	4.5	40	7.3	2824	F161ST105(1)050(2)	pending
50	30	0.022	A31	9.1	5.5	40	10.2	4036	F161WP223(1)050(2)	pending
50	30	0.027	A31	9.1	5.5	40	10.2	4036	F161WP273(1)050(2)	pending
50	30	0.033	A31	9.1	5.5	40	10.2	4036	F161WP333(1)050(2)	pending
50	30	0.039	A31	9.1	5.5	40	10.2	4036	F161WP393(1)050(2)	
50	30	0.047	A31	9.1	5.5	40	10.2	4036	F161WP473(1)050(2)	
50	30	0.056	A31	9.1	5.5	40	10.2	4036	F161WP563(1)050(2)	
50	30	0.068	A31	9.1	5.5	40	10.2	4036	F161WP683(1)050(2)	
50	30	0.082	A31	9.1	5.5	40	10.2	4036	F161WP823(1)050(2)	
50	30	0.1	A31	9.1	5.5	40	10.2	4036	F161WP104(1)050(2)	
50	30	0.12	A31	9.1	5.5	40	10.2	4036	F161WP124(1)050(2)	
50	30	0.15	A31	9.1	5.5	40	10.2	4036	F161WP154(1)050(2)	
50	30	0.18	A31	9.1	5.5	40	10.2	4036	F161WP184(1)050(2)	
50	30	0.22	A31	9.1	5.5	40	10.2	4036	F161WP224(1)050(2)	
50	30	0.27	A31	9.1	5.5	40	10.2	4036	F161WP274(1)050(2)	
50	30	0.33	A31	9.1	5.5	40	10.2	4036	F161WP334(1)050(2)	
50	30	0.39	A31	9.1	5.5	40	10.2	4036	F161WP394(1)050(2)	

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Pending: Available in approximately 6 months. Please check our web site regularly for updates.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (μF)	Size Code	Dimensions in mm			Chip Size	dV/dt (V/ μs)	Part Number	Remark
				B	H	L				
50	30	0.47	A31	9.1	5.5	40	10.2	4036	F161WP474(1)050(2)	
50	30	0.56	A31	9.1	5.5	40	10.2	4036	F161WP564(1)050(2)	
50	30	0.68	A31	9.1	5.5	40	10.2	4036	F161WP684(1)050(2)	
50	30	0.82	A31	9.1	5.5	40	10.2	4036	F161WP824(1)050(2)	
50	30	1	A31	9.1	5.5	40	10.2	4036	F161WP105(1)050(2)	
50	30	1.2	A31	9.1	5.5	40	10.2	4036	F161WP125(1)050(2)	
50	30	1.5	A31	9.1	5.5	40	10.2	4036	F161WP155(1)050(2)	
50	30	1.8	A31	9.1	5.5	40	10.2	4036	F161WP185(1)050(2)	
50	30	2.2	A31	9.1	5.5	40	10.2	4036	F161WP225(1)050(2)	
50	30	2.7	B31	11.5	6.5	40	12.7	5045	F161YR275(1)050(2)	pending
50	30	3.3	B31	11.5	6.5	40	12.7	5045	F161YR335(1)050(2)	pending
50	30	3.9	B31	11.5	6.5	40	12.7	5045	F161YR395(1)050(2)	pending
50	30	4.7	B31	11.5	6.5	40	12.7	5045	F161YR475(1)050(2)	pending
50	30	5.6	C31	15.0	7.0	40	16.5	6560	F161ZS565(1)050(2)	pending
50	30	6.8	C31	15.0	7.0	40	16.5	6560	F161ZS685(1)050(2)	pending
50	30	8.2	C31	15.0	7.0	40	16.5	6560	F161ZS825(1)050(2)	pending
50	30	10.0	C31	15.0	7.0	40	16.5	6560	F161ZS106(1)050(2)	pending
50	30	12.0	C31	15.0	7.0	40	16.5	6560	F161ZS126(1)050(2)	pending
63	40	0.01	K31	6.0	2.5	40	7.3	2824	F161SG103(1)063(2)	pending
63	40	0.012	K31	6.0	2.5	40	7.3	2824	F161SG123(1)063(2)	pending
63	40	0.015	K31	6.0	2.5	40	7.3	2824	F161SG153(1)063(2)	pending
63	40	0.018	K31	6.0	2.5	40	7.3	2824	F161SG183(1)063(2)	pending
63	40	0.022	K31	6.0	2.5	40	7.3	2824	F161SG223(1)063(2)	pending
63	40	0.027	K31	6.0	2.5	40	7.3	2824	F161SG273(1)063(2)	pending
63	40	0.033	K31	6.0	2.5	40	7.3	2824	F161SG333(1)063(2)	pending
63	40	0.039	K31	6.0	2.5	40	7.3	2824	F161SG393(1)063(2)	pending
63	40	0.047	K31	6.0	2.5	40	7.3	2824	F161SG473(1)063(2)	pending
63	40	0.056	K31	6.0	2.5	40	7.3	2824	F161SG563(1)063(2)	pending
63	40	0.068	K31	6.0	2.5	40	7.3	2824	F161SG683(1)063(2)	pending
63	40	0.082	K31	6.0	2.5	40	7.3	2824	F161SG823(1)063(2)	pending
63	40	0.1	K31	6.0	2.5	40	7.3	2824	F161SG104(1)063(2)	pending
63	40	0.12	K31	6.0	2.5	40	7.3	2824	F161SG124(1)063(2)	pending
63	40	0.15	K31	6.0	2.5	40	7.3	2824	F161SG154(1)063(2)	pending
63	40	0.18	K33	6.0	3.0	40	7.3	2824	F161SL184(1)063(2)	pending
63	40	0.22	K33	6.0	3.0	40	7.3	2824	F161SL224(1)063(2)	pending
63	40	0.27	K35	6.0	3.5	40	7.3	2824	F161SP274(1)063(2)	pending
63	40	0.33	K35	6.0	3.5	40	7.3	2824	F161SP334(1)063(2)	pending
63	40	0.39	K35	6.0	3.5	40	7.3	2824	F161SP394(1)063(2)	pending
63	40	0.47	K35	6.0	3.5	40	7.3	2824	F161SP474(1)063(2)	pending
63	40	0.022	A31	9.1	5.5	40	10.2	4036	F161WP223(1)063(2)	
63	40	0.027	A31	9.1	5.5	40	10.2	4036	F161WP273(1)063(2)	
63	40	0.033	A31	9.1	5.5	40	10.2	4036	F161WP333(1)063(2)	
63	40	0.039	A31	9.1	5.5	40	10.2	4036	F161WP393(1)063(2)	
63	40	0.047	A31	9.1	5.5	40	10.2	4036	F161WP473(1)063(2)	
63	40	0.056	A31	9.1	5.5	40	10.2	4036	F161WP563(1)063(2)	
63	40	0.068	A31	9.1	5.5	40	10.2	4036	F161WP683(1)063(2)	
63	40	0.082	A31	9.1	5.5	40	10.2	4036	F161WP823(1)063(2)	
63	40	0.1	A31	9.1	5.5	40	10.2	4036	F161WP104(1)063(2)	
63	40	0.12	A31	9.1	5.5	40	10.2	4036	F161WP124(1)063(2)	
63	40	0.15	A31	9.1	5.5	40	10.2	4036	F161WP154(1)063(2)	
63	40	0.18	A31	9.1	5.5	40	10.2	4036	F161WP184(1)063(2)	
63	40	0.22	A31	9.1	5.5	40	10.2	4036	F161WP224(1)063(2)	
63	40	0.27	A31	9.1	5.5	40	10.2	4036	F161WP274(1)063(2)	
63	40	0.33	A31	9.1	5.5	40	10.2	4036	F161WP334(1)063(2)	
63	40	0.39	A31	9.1	5.5	40	10.2	4036	F161WP394(1)063(2)	
63	40	0.47	A31	9.1	5.5	40	10.2	4036	F161WP474(1)063(2)	
63	40	0.68	A31	9.1	5.5	40	10.2	4036	F161WP684(1)063(2)	

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Pending: Available in approximately 6 months. Please check our web site regularly for updates.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (μF)	Size Code	Dimensions in mm			Chip Size	dV/dt (V/ μs)	Part Number	Remark
				B	H	L				
63	40	0.82	A31	9.1	5.5	40	10.2	4036	F161WP824(1)063(2)	
63	40	1	A31	9.1	5.5	40	10.2	4036	F161WP105(1)063(2)	
63	40	1.2	A31	9.1	5.5	40	10.2	4036	F161WP125(1)063(2)	
63	40	1.5	A31	9.1	5.5	40	10.2	4036	F161WP155(1)063(2)	
63	40	1.8	B31	11.5	6.5	40	12.7	5045	F161YR185(1)063(2)	pending
63	40	2.2	B31	11.5	6.5	40	12.7	5045	F161YR225(1)063(2)	pending
63	40	2.7	B31	11.5	6.5	40	12.7	5045	F161YR275(1)063(2)	pending
63	40	3.3	B31	11.5	6.5	40	12.7	5045	F161YR335(1)063(2)	pending
63	40	3.9	C31	15.0	7.0	40	16.5	6560	F161ZS395(1)063(2)	pending
63	40	4.7	C31	15.0	7.0	40	16.5	6560	F161ZS475(1)063(2)	pending
100	63	0.01	J31	5.0	2.5	50	5.7	2220	F161PL103(1)100(2)	pending
100	63	0.012	J31	5.0	2.5	50	5.7	2220	F161PL123(1)100(2)	pending
100	63	0.015	J31	5.0	2.5	50	5.7	2220	F161PL153(1)100(2)	pending
100	63	0.018	J31	5.0	2.5	50	5.7	2220	F161PL183(1)100(2)	pending
100	63	0.022	J31	5.0	2.5	50	5.7	2220	F161PL223(1)100(2)	pending
100	63	0.027	J31	5.0	2.5	50	5.7	2220	F161PL273(1)100(2)	pending
100	63	0.033	J31	5.0	2.5	50	5.7	2220	F161PL333(1)100(2)	pending
100	63	0.039	J31	5.0	2.5	50	5.7	2220	F161PL393(1)100(2)	pending
100	63	0.047	J31	5.0	2.5	50	5.7	2220	F161PL473(1)100(2)	pending
100	63	0.056	J33	5.0	3.0	50	5.7	2220	F161PP563(1)100(2)	pending
100	63	0.068	J33	5.0	3.0	50	5.7	2220	F161PP683(1)100(2)	pending
100	63	0.082	J35	5.0	4.0	50	5.7	2220	F161PU823(1)100(2)	pending
100	63	0.1	J35	5.0	4.0	50	5.7	2220	F161PU104(1)100(2)	pending
100	63	0.01	K31	6.0	2.5	50	7.3	2824	F161SG103(1)100(2)	pending
100	63	0.012	K31	6.0	2.5	50	7.3	2824	F161SG123(1)100(2)	pending
100	63	0.015	K31	6.0	2.5	50	7.3	2824	F161SG153(1)100(2)	pending
100	63	0.018	K31	6.0	2.5	50	7.3	2824	F161SG183(1)100(2)	pending
100	63	0.022	K31	6.0	2.5	50	7.3	2824	F161SG223(1)100(2)	pending
100	63	0.027	K31	6.0	2.5	50	7.3	2824	F161SG273(1)100(2)	pending
100	63	0.033	K31	6.0	2.5	50	7.3	2824	F161SG333(1)100(2)	pending
100	63	0.039	K31	6.0	2.5	50	7.3	2824	F161SG393(1)100(2)	pending
100	63	0.047	K31	6.0	2.5	50	7.3	2824	F161SG473(1)100(2)	pending
100	63	0.056	K31	6.0	2.5	50	7.3	2824	F161SG563(1)100(2)	pending
100	63	0.068	K31	6.0	2.5	50	7.3	2824	F161SG683(1)100(2)	pending
100	63	0.082	K31	6.0	2.5	50	7.3	2824	F161SG823(1)100(2)	pending
100	63	0.1	K31	6.0	2.5	50	7.3	2824	F161SG104(1)100(2)	pending
100	63	0.12	K33	6.0	3.0	50	7.3	2824	F161SL124(1)100(2)	pending
100	63	0.15	K35	6.0	3.5	50	7.3	2824	F161SP154(1)100(2)	pending
100	63	0.18	K35	6.0	3.5	50	7.3	2824	F161SP184(1)100(2)	pending
100	63	0.22	K35	6.0	4.5	50	7.3	2824	F161ST224(1)100(2)	pending
100	63	0.022	A31	9.1	5.5	50	10.2	4036	F161WP223(1)100(2)	
100	63	0.027	A31	9.1	5.5	50	10.2	4036	F161WP273(1)100(2)	
100	63	0.033	A31	9.1	5.5	50	10.2	4036	F161WP333(1)100(2)	
100	63	0.039	A31	9.1	5.5	50	10.2	4036	F161WP393(1)100(2)	
100	63	0.047	A31	9.1	5.5	50	10.2	4036	F161WP473(1)100(2)	
100	63	0.056	A31	9.1	5.5	50	10.2	4036	F161WP563(1)100(2)	
100	63	0.068	A31	9.1	5.5	50	10.2	4036	F161WP683(1)100(2)	
100	63	0.082	A31	9.1	5.5	50	10.2	4036	F161WP823(1)100(2)	
100	63	0.1	A31	9.1	5.5	50	10.2	4036	F161WP104(1)100(2)	
100	63	0.12	A31	9.1	5.5	50	10.2	4036	F161WP124(1)100(2)	
100	63	0.15	A31	9.1	5.5	50	10.2	4036	F161WP154(1)100(2)	
100	63	0.18	A31	9.1	5.5	50	10.2	4036	F161WP184(1)100(2)	
100	63	0.22	A31	9.1	5.5	50	10.2	4036	F161WP224(1)100(2)	
100	63	0.27	A31	9.1	5.5	50	10.2	4036	F161WP274(1)100(2)	
100	63	0.33	A31	9.1	5.5	50	10.2	4036	F161WP334(1)100(2)	
100	63	0.39	A31	9.1	5.5	50	10.2	4036	F161WP394(1)100(2)	
100	63	0.47	A31	9.1	5.5	50	10.2	4036	F161WP474(1)100(2)	
100	63	0.56	B31	11.5	6.5	50	12.7	5045	F161YR564(1)100(2)	pending

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Pending: Available in approximately 6 months. Please check our web site regularly for updates.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (μF)	Size Code	Dimensions in mm			Chip Size	dV/dt (V/ μs)	Part Number	Remark
				B	H	L				
100	63	0.68	B31	11.5	6.5	50	12.7	5045	F161YR684(1)100(2)	pending
100	63	0.82	B31	11.5	6.5	50	12.7	5045	F161YR824(1)100(2)	pending
100	63	1	B31	11.5	6.5	50	12.7	5045	F161YR105(1)100(2)	pending
100	63	1.2	C31	15.0	7.0	50	16.5	6560	F161ZS125(1)100(2)	pending
100	63	1.5	C31	15.0	7.0	50	16.5	6560	F161ZS155(1)100(2)	pending
100	63	1.8	C31	15.0	7.0	50	16.5	6560	F161ZS185(1)100(2)	pending
100	63	2.2	C31	15.0	7.0	50	16.5	6560	F161ZS225(1)100(2)	pending
100	63	2.7	C31	15.0	7.0	50	16.5	6560	F161ZS275(1)100(2)	pending
100	63	3.3	C31	15.0	7.0	50	16.5	6560	F161ZS335(1)100(2)	pending
250	160	0.01	K31	6.0	2.5	150	7.3	2824	F161SG103(1)250(2)	pending
250	160	0.012	K31	6.0	2.5	150	7.3	2824	F161SG123(1)250(2)	pending
250	160	0.015	K31	6.0	2.5	150	7.3	2824	F161SG153(1)250(2)	pending
250	160	0.018	K33	6.0	3.0	150	7.3	2824	F161SL183(1)250(2)	pending
250	160	0.022	K33	6.0	3.0	150	7.3	2824	F161SL223(1)250(2)	pending
250	160	0.027	K35	6.0	3.5	150	7.3	2824	F161SP273(1)250(2)	pending
250	160	0.033	K35	6.0	3.5	150	7.3	2824	F161SP333(1)250(2)	pending
250	160	0.039	K35	6.0	3.5	150	7.3	2824	F161SP393(1)250(2)	pending
250	160	0.047	K37	6.0	4.5	150	7.3	2824	F161ST473(1)250(2)	pending
250	160	0.022	A31	9.1	5.5	150	10.2	4036	F161WP223(1)250(2)	
250	160	0.027	A31	9.1	5.5	150	10.2	4036	F161WP273(1)250(2)	
250	160	0.033	A31	9.1	5.5	150	10.2	4036	F161WP333(1)250(2)	
250	160	0.039	A31	9.1	5.5	150	10.2	4036	F161WP393(1)250(2)	
250	160	0.047	A31	9.1	5.5	150	10.2	4036	F161WP473(1)250(2)	
250	160	0.056	A31	9.1	5.5	150	10.2	4036	F161WP563(1)250(2)	
250	160	0.068	A31	9.1	5.5	150	10.2	4036	F161WP683(1)250(2)	
250	160	0.082	A31	9.1	5.5	150	10.2	4036	F161WP823(1)250(2)	
250	160	0.1	A31	9.1	5.5	150	10.2	4036	F161WP104(1)250(2)	
250	160	0.12	A31	9.1	5.5	150	10.2	4036	F161WP124(1)250(2)	
250	160	0.15	A31	9.1	5.5	150	10.2	4036	F161WP154(1)250(2)	
250	160	0.18	B31	11.5	6.5	150	12.7	5045	F161YR184(1)250(2)	pending
250	160	0.22	B31	11.5	6.5	150	12.7	5045	F161YR224(1)250(2)	pending
250	160	0.27	B31	11.5	6.5	150	12.7	5045	F161YR274(1)250(2)	pending
250	160	0.33	B31	11.5	6.5	150	12.7	5045	F161YR334(1)250(2)	pending
250	160	0.39	B31	11.5	6.5	150	12.7	5045	F161YR394(1)250(2)	pending
250	160	0.47	B31	11.5	6.5	150	12.7	5045	F161YR474(1)250(2)	pending
250	160	0.56	C31	15.0	7.0	150	16.5	6560	F161ZS564(1)250(2)	pending
250	160	0.68	C31	15.0	7.0	150	16.5	6560	F161ZS684(1)250(2)	pending
250	160	0.82	C31	15.0	7.0	150	16.5	6560	F161ZS824(1)250(2)	pending
250	160	1	C31	15.0	7.0	150	16.5	6560	F161ZS105(1)250(2)	pending
400	200	0.022	A31	9.1	5.5	200	10.2	4036	F161WP223(1)400(2)	pending
400	200	0.027	A31	9.1	5.5	200	10.2	4036	F161WP273(1)400(2)	pending
400	200	0.033	A31	9.1	5.5	200	10.2	4036	F161WP333(1)400(2)	pending
400	200	0.039	A31	9.1	5.5	200	10.2	4036	F161WP393(1)400(2)	pending
400	200	0.047	A31	9.1	5.5	200	10.2	4036	F161WP473(1)400(2)	pending
400	200	0.056	A31	9.1	5.5	200	10.2	4036	F161WP563(1)400(2)	pending
400	200	0.068	A31	9.1	5.5	200	10.2	4036	F161WP683(1)400(2)	pending
400	200	0.082	B31	11.5	6.5	200	12.7	5045	F161YR823(1)400(2)	pending
400	200	0.1	B31	11.5	6.5	200	12.7	5045	F161YR104(1)400(2)	pending
400	200	0.12	B31	11.5	6.5	200	12.7	5045	F161YR124(1)400(2)	pending
400	200	0.15	B31	11.5	6.5	200	12.7	5045	F161YR154(1)400(2)	pending
400	200	0.18	C31	15.0	7.0	200	16.5	6560	F161ZS184(1)400(2)	
400	200	0.22	C31	15.0	7.0	200	16.5	6560	F161ZS224(1)400(2)	
400	200	0.27	C31	15.0	7.0	200	16.5	6560	F161ZS274(1)400(2)	
400	200	0.33	C31	15.0	7.0	200	16.5	6560	F161ZS334(1)400(2)	
400	200	0.39	C31	15.0	7.0	200	16.5	6560	F161ZS394(1)400(2)	
400	200	0.47	C31	15.0	7.0	200	16.5	6560	F161ZS474(1)400(2)	

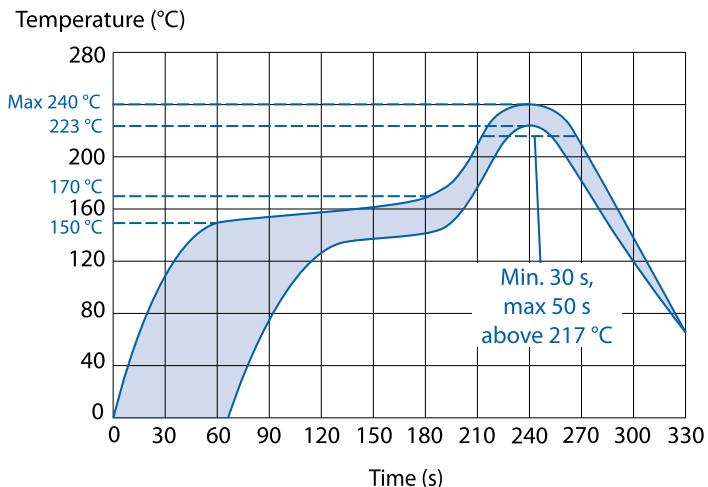
(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Pending: Available in approximately 6 months. Please check our web site regularly for updates.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 240°C.



Marking

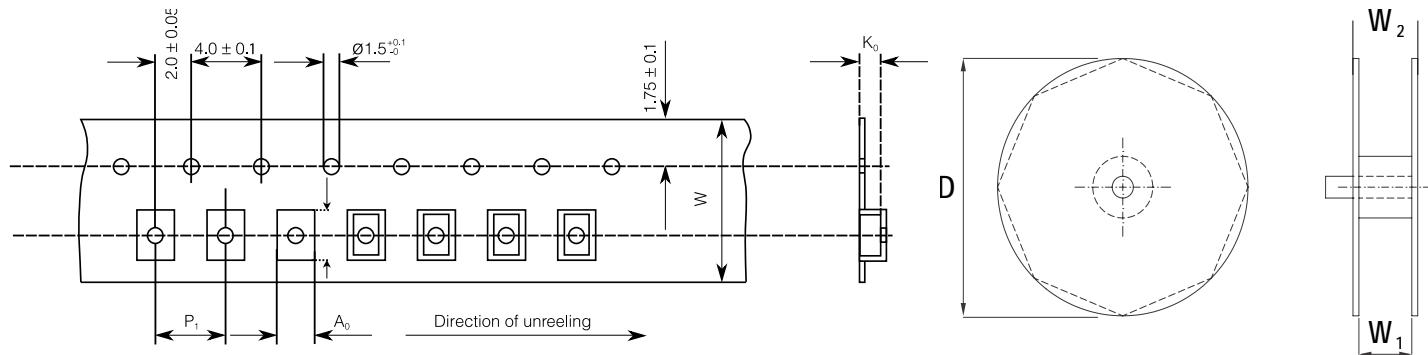
- Capacitance
- Capacitance tolerance code
- Rated voltage code
- Capacitor type N for F161
- Manufacturing date code

Packaging Quantities

Chip Size (EIA)	Base (mm)	Height (mm)	Length (mm)	Bulk	Reel Horizontal Orientation	Reel Vertical Orientation
2220	5	2.5	5.7	2000	3100	
2220	5	3	5.7	2000	2400	
2220	5	4	5.7	2000	2100	
2824	6	2.5	7.3	2000	3100	
2824	6	3	7.3	2000	2500	
2824	6	3.5	7.3	2000	2300	
2824	6	4.5	7.3	1000	1700	
4036	9.1	5.5	10.2	1000	800	500
5045	11.5	6.5	12.7	1000	600	400
6560	15	7	16.5	800	500	200

Carrier Taping & Packaging (IEC 60286-2)

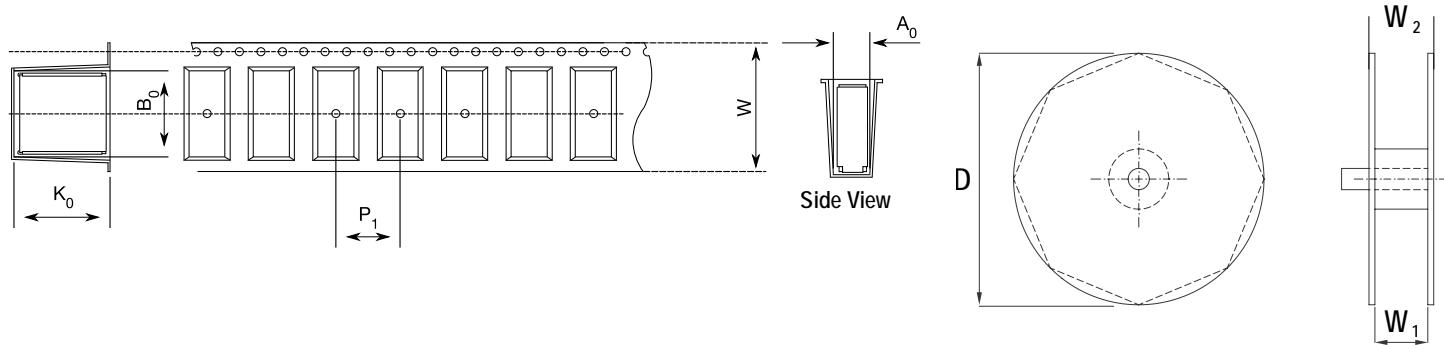
Horizontal Taping Orientation



EIA Size Code Horizontal Mounting	Dimensions in mm			Taping Specification							
	B	H	L	W	P ₁	A ₀	B ₀	K ₀	D	W ₁	W ₂
	Nominal	Nominal	Nominal	-0/+0.3	+/-0.1	Nominal	Nominal	Nominal	-/+2.0	-0/+2	Maximum
2220	5.0	2.5	5.7	12.0	8.0	5.5	6.0	2.8	330	12.4	22.0
2220	5.0	3.0	5.7	12.0	8.0	5.5	6.0	3.3	330	12.4	22.0
2220	5.0	4.0	5.7	12.0	8.0	5.5	6.0	4.3	330	12.4	22.0
2824	6.0	2.5	7.3	12.0	8.0	6.5	7.5	2.8	330	12.4	22.0
2824	6.0	3.0	7.3	12.0	8.0	6.5	7.5	3.3	330	12.4	22.0
2824	6.0	3.5	7.3	12.0	8.0	6.5	7.5	3.8	330	12.4	22.0
2824	6.0	4.5	7.3	12.0	8.0	6.5	7.5	4.8	330	12.4	22.0
4036	9.1	5.5	10.2	16.0	16.0	9.5	10.5	5.8	330	16.4	22.0
5045	11.5	6.5	12.7	24.0	16.0	11.9	13.1	6.8	330	24.4	30.0
6560	15.0	7.0	16.5	24.0	20.0	15.4	16.8	7.3	330	24.4	30.0

Carrier Taping & Packaging (IEC 60286-2) cont'd

Vertical Taping Orientation



Size Code Vertical Mounting	Dimensions in mm			Taping Specification							
	B	H	L	W	P ₁	A ₀	B ₀	K ₀	D	W ₁	W ₂
	Nominal	Nominal	Nominal	-0/+0.3	+/-0.1	Nominal	Nominal	Nominal	-/+2.0	-0/+2	Maximum
4022	5.5	9.1	10.2	24.0	16.0	6.0	10.5	9.3	330	24.4	30.0
5026	6.5	11.5	12.7	24.0	16.0	6.9	13.1	11.8	330	24.4	30.0
6528	7.0	15.0	16.5	44.0	20.0	7.5	17.0	15.3	330	44.5	49.5

Note: Chip dimensions B and H correspond to dimensions H and B in the horizontal mounting table.

General Purpose, High Stability and AC Line EMI Suppression MDC Series Dual In-Line, 50 – 630 VDC, High Current

The Capacitance Company
KEMET
CHARGED.[®]

Overview

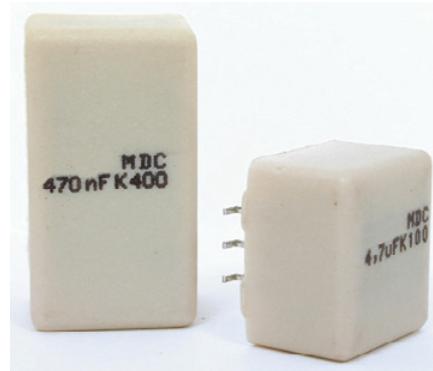
Dual in-line (DIL) metallized polyester (PET) film capacitor for surface mounting. Encapsulation in self-extinguishing material meeting the requirements of UL 94 V-0.

Applications

Typical applications include high frequency switched-mode power supplies, DC/DC converters and input/output filtering.

Benefits

- Rated voltage: 50 – 630 VDC
- Rated voltage: 30 – 220 VAC
- Capacitance range: 0.033 – 15 μ F
- Capacitance tolerance: $\pm 5\%$, $\pm 10\%$, other tolerances on request
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



Legacy Part Number System

MDC	10	333	K	50	A52	P3	TUBE
Series	Lead Spacing (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Number of Leads per Side	Packaging Code
Dual In-Line, Metallized Polyester	10 15	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ± 5 K = $\pm 10\%$ Other tolerances on request	50 100 250 400 630	See Dimension Table	P3 = 3 leads P4 = 4 leads P5 = 5 leads P7 = 7 leads P8 = 8 leads	See Ordering Options Table

New KEMET Part Number System

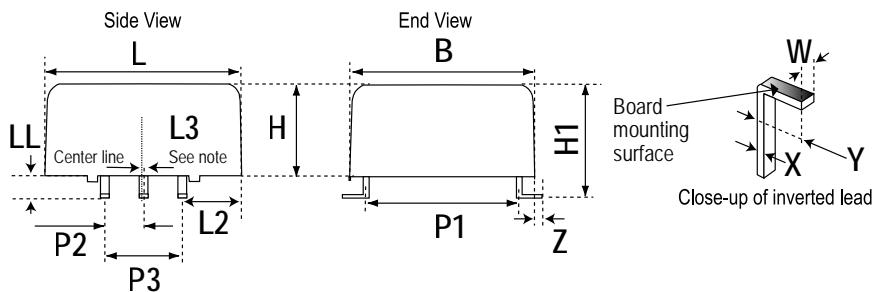
F	15	3	A	A	333	K	050	T
Capacitor Class	Series	Number of Leads per Side	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film	Dual In-Line, Metallized Polyester	3 = 3 leads 4 = 4 leads 5 = 5 leads 7 = 7 leads 8 = 8 leads	A = 10 B = 15	A = Standard box size	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ± 5 K = $\pm 10\%$ Other tolerances on request	050 = 50 100 = 100 250 = 250 400 = 400 630 = 630	See Ordering Options Table

One world. One KEMET

Ordering Options Table

Packaging Type	KEMET Packaging Code	Legacy Packaging Code
Standard Packaging Options		
Bulk (Tube)	T	TUBE
Case Size A53 Tape & Reel (Standard Reel)	VV687	TR32

Dimensions – Millimeters



Legacy Size Code	Leads per Side	P1	P2	P3 ⁽¹⁾	B	H	L	H1	L2	L3 ⁽²⁾	W	X	Y	Z	LL
		+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.4	+/-0.2	Maximum	+/-0.05	+/-0.05	+/-0.2	Nominal	+/-0.2
A52	3	10.0	2.54	5.08	12.2	6.05	11.0	7.75	2.96	0.2	0.5	0.35	1.5	0.25	1.7
A53	3	10.0	2.54	5.08	12.7	9.0	14.0	10.5	4.46	0.2	0.5	0.35	1.5	0	1.5
A54	3	10.0	2.54	5.08	12.2	6.05	13.5	7.75	4.21	0.2	0.5	0.35	1.5	0.25	1.7
A55	3	10.0	2.54	5.08	12.2	6.05	16.5	7.75	5.71	0.2	0.5	0.35	1.5	0.25	1.7
B53	3	15.0	2.54	5.08	16.5	6.05	11.0	7.75	2.96	0.2	0.5	0.35	1.5	0.6	1.7
B55	3	15.0	2.54	5.08	16.5	6.05	12.2	7.75	3.56	0.2	0.5	0.35	1.5	0.6	1.7
A53	4	10.0	2.54	7.62	12.7	9.0	14.0	10.5	3.19	0.2	0.5	0.35	1.5	0	1.5
A54	4	10.0	2.54	7.62	12.2	6.05	13.5	7.75	2.94	0.2	0.5	0.35	1.5	0.25	1.7
A55	4	10.0	2.54	7.62	12.2	6.05	16.5	7.75	4.44	0.2	0.5	0.35	1.5	0.25	1.7
B55	4	15.0	2.54	7.62	16.5	6.05	12.2	7.75	2.29	0.2	0.5	0.35	1.5	0.6	1.7
A55	5	10.0	2.54	10.16	12.2	6.05	16.5	7.75	3.17	0.2	0.5	0.35	1.5	0.25	1.7
A57	7	10.0	2.54	15.24	12.7	9.0	23.0	10.7	3.88	0.2	0.5	0.35	1.5	0	1.7
A58	7	10.0	2.54	15.24	12.7	11.0	23.0	12.5	3.88	0.2	0.5	0.35	1.5	0	1.5
A57	8	10.0	2.54	17.78	12.7	9.0	23.0	10.7	2.61	0.2	0.5	0.35	1.5	0	1.7
A58	8	10.0	2.54	17.78	12.7	11.0	23.0	12.5	2.61	0.2	0.5	0.35	1.5	0	1.5

Drawing shows MDC with three leads per side. Similar dimensional requirements apply to the 4, 5, 7, and 8 leads per side configurations.

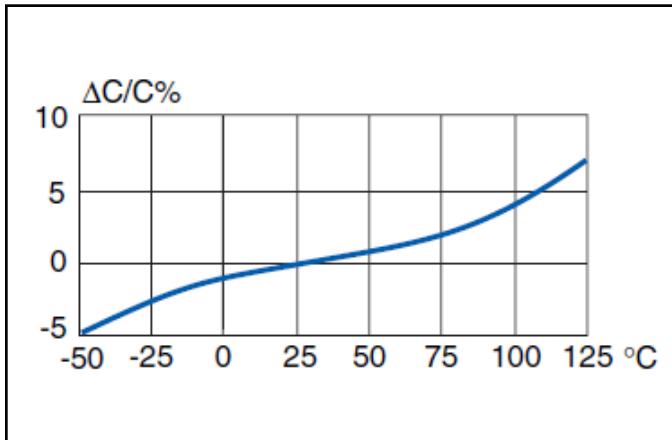
(1) P3 represents the cumulative tolerance of all leads.

(2) L3 represents the extent to which the center line of the leads misaligns with the center line of the body. Dimension shown is the maximum such misalignment allowed.

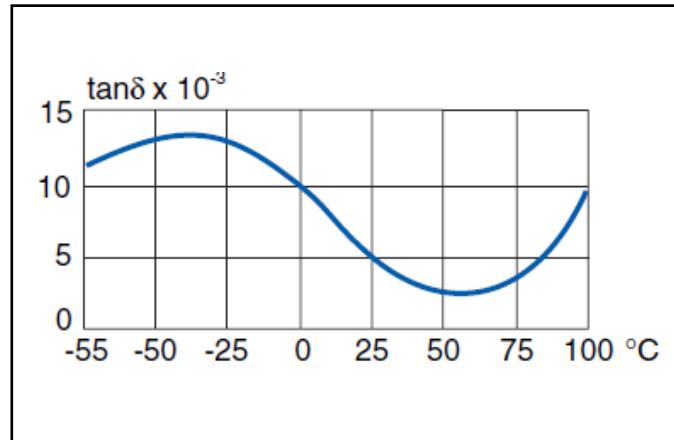
Performance Characteristics

Rated Voltage (VDC)	50	100	250	400	630
Rated Voltage (VAC)	30	63	160	200	220
Capacitance Range (μF)	0.033 – 15	0.033 – 10	0.033 – 1.5	0.033 – 0.47	0.033 – 0.18
Capacitance Tolerance	$\pm 5\%$, $\pm 10\%$, other tolerances on request				
Category Temperature Range	-55°C to +125°C				
Rated Temperature	+85°C				
Voltage Derating	The rated voltage is decreased with 1.25%/°C from +85°C				
Climatic Category	55/125/56				
Test Voltage	1.6 x V_R , 60 seconds				
Insulation Resistance	Measured at +20°C According to IEC 60384-2				
	Minimum Value Between Terminals				
		$C \leq 0.33 \mu\text{F}$		$C > 0.33 \mu\text{F}$	
	$V_R \leq 100$	15,000 MΩ		5,000 MΩ • μF	
Dissipation Factor	$V_R > 100$	30,000 MΩ		10,000 MΩ • μF	
	Maximum Values at +23°C				
		$C \leq 0.1 \mu\text{F}$	$0.1 < C < 3.3 \mu\text{F}$	$3.3 \leq C \leq 10 \mu\text{F}$	$C > 10 \mu\text{F}$
	1 kHz	0.8%	0.8%	0.8%	0.8%
Self Inductance	10 kHz	1.5%	1.5%	1.5%	2.0%
	100 kHz	2.5%	5.0%		
	Approximately 4 nH				

Typical Capacitance vs. Temperature at 1 kHz



Typical Dissipation Factor vs. Temperature at 1 kHz



Maximum RMS Voltage V_{rms} (V) vs. Frequency

Value	Rated Voltage	Case Size	1 kHz	10 kHz	100 kHz	500 kHz	1 MHz
1.0 μ F	250 V	A57	150.0	36.0	9.2	2.9	1.3
2.2 μ F	100 V	A52	50.0	25.0	5.0	1.2	0.6
3.9 μ F	100 V	A52	50.0	18.0	4.0	1.0	0.3
4.7 μ F	100 V	A54	50.0	16.0	3.5	0.7	0.2
6.8 μ F	100 V	A57	50.0	15.5	2.2	0.5	0.2
10 μ F	100 V	A58	50.0	15.0	2.0	0.4	0.2

Maximum RMS Current I_{rms} (A) vs. Frequency

Value	Rated Voltage	Case Size	1 kHz	10 kHz	100 kHz	500 kHz	1 MHz
1.0 μ F	250 V	A57	1.0	2.2	5.5	9.0	10.0
2.2 μ F	100 V	A52	1.5	2.3	6.0	7.5	10.0
3.9 μ F	100 V	A52	2.0	4.0	10.0	11.0	11.5
4.7 μ F	100 V	A54	2.0	4.5	10.0	12.5	12.5
6.8 μ F	100 V	A57	3.0	6.0	11.0	13.0	13.5
10 μ F	100 V	A58	4.0	9.0	13.0	14.0	14.5

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.



RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz ($\text{m}\Omega$)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.033	AA/A52	12.2	6.05	11.0	10	390	F153AA333(1)050T	MDC10333(1)50A52P3TUBE
50	30	0.039	AA/A52	12.2	6.05	11.0	10	330	F153AA393(1)050T	MDC10393(1)50A52P3TUBE
50	30	0.047	AA/A52	12.2	6.05	11.0	10	270	F153AA473(1)050T	MDC10473(1)50A52P3TUBE
50	30	0.056	AA/A52	12.2	6.05	11.0	10	230	F153AA563(1)050T	MDC10563(1)50A52P3TUBE
50	30	0.068	AA/A52	12.2	6.05	11.0	10	190	F153AA683(1)050T	MDC10683(1)50A52P3TUBE
50	30	0.082	AA/A52	12.2	6.05	11.0	10	160	F153AA823(1)050T	MDC10823(1)50A52P3TUBE
50	30	0.10	AA/A52	12.2	6.05	11.0	10	130	F153AA104(1)050T	MDC10104(1)50A52P3TUBE
50	30	0.12	AA/A52	12.2	6.05	11.0	10	110	F153AA124(1)050T	MDC10124(1)50A52P3TUBE
50	30	0.15	AA/A52	12.2	6.05	11.0	10	85	F153AA154(1)050T	MDC10154(1)50A52P3TUBE
50	30	0.18	AA/A52	12.2	6.05	11.0	10	70	F153AA184(1)050T	MDC10184(1)50A52P3TUBE
50	30	0.22	AA/A52	12.2	6.05	11.0	10	58	F153AA224(1)050T	MDC10224(1)50A52P3TUBE
50	30	0.27	AA/A52	12.2	6.05	11.0	10	47	F153AA274(1)050T	MDC10274(1)50A52P3TUBE
50	30	0.33	AA/A52	12.2	6.05	11.0	10	39	F153AA334(1)050T	MDC10334(1)50A52P3TUBE
50	30	0.39	AA/A52	12.2	6.05	11.0	10	33	F153AA394(1)050T	MDC10394(1)50A52P3TUBE
50	30	0.47	AA/A52	12.2	6.05	11.0	10	30	F153AA474(1)050T	MDC10474(1)50A52P3TUBE
50	30	0.56	AA/A52	12.2	6.05	11.0	10	26	F153AA564(1)050T	MDC10564(1)50A52P3TUBE
50	30	0.68	AA/A52	12.2	6.05	11.0	10	21	F153AA684(1)050T	MDC10684(1)50A52P3TUBE
50	30	0.82	AA/A52	12.2	6.05	11.0	10	18	F153AA824(1)050T	MDC10824(1)50A52P3TUBE
50	30	1.0	AA/A52	12.2	6.05	11.0	10	15	F153AA105(1)050T	MDC10105(1)50A52P3TUBE
50	30	1.2	AA/A52	12.2	6.05	11.0	10	14	F153AA125(1)050T	MDC10125(1)50A52P3TUBE
50	30	1.5	AA/A52	12.2	6.05	11.0	10	13	F153AA155(1)050T	MDC10155(1)50A52P3TUBE
50	30	1.8	AA/A52	12.2	6.05	11.0	10	12	F153AA185(1)050T	MDC10185(1)50A52P3TUBE
50	30	2.2	AA/A52	12.2	6.05	11.0	10	11	F153AA225(1)050T	MDC10225(1)50A52P3TUBE
50	30	2.7	AA/A52	12.2	6.05	11.0	10	10	F153AA275(1)050T	MDC10275(1)50A52P3TUBE
50	30	3.3	AA/A52	12.2	6.05	11.0	10	8	F153AA335(1)050T	MDC10335(1)50A52P3TUBE
50	30	3.9	AA/A52	12.2	6.05	11.0	10	7	F153AA395(1)050T	MDC10395(1)50A52P3TUBE
50	30	4.7	AA/A52	12.2	6.05	11.0	10	6	F153AA475(1)050T	MDC10475(1)50A52P3TUBE
50	30	5.6	AA/A54	12.2	6.05	13.5	10	5	F15(2)AA656(1)050T	MDC10565(1)50A54P(2)TUBE
50	30	6.8	AA/A55	12.2	6.05	16.5	10	5	F15(3)AA685(1)050T	MDC10685(1)50A55P(3)TUBE
50	30	8.2	AA/A57	12.7	9.0	23.0	10	4	F15(4)AA685(1)050T	MDC10825(1)50A57P(4)TUBE
50	30	10	AA/A57	12.7	9.0	23.0	10	3	F15(4)AA106(1)050T	MDC10106(1)50A57P(4)TUBE
50	30	12	AA/A58	12.7	11.0	23.0	10	3	F15(4)AA126(1)050T	MDC10126(1)50A58P(4)TUBE
50	30	15	AA/A58	12.7	11.0	23.0	10	3	F15(4)AA156(1)050T	MDC10156(1)50A58P(4)TUBE
50	30	0.033	BA/B53	16.5	6.05	11.0	15	390	F153BA333(1)050T	MDC15333(1)50B53P3TUBE
50	30	0.039	BA/B53	16.5	6.05	11.0	15	330	F153BA393(1)050T	MDC15393(1)50B53P3TUBE
50	30	0.047	BA/B53	16.5	6.05	11.0	15	270	F153BA473(1)050T	MDC15473(1)50B53P3TUBE
50	30	0.056	BA/B53	16.5	6.05	11.0	15	230	F153BA563(1)050T	MDC15563(1)50B53P3TUBE
50	30	0.068	BA/B53	16.5	6.05	11.0	15	190	F153BA683(1)050T	MDC15683(1)50B53P3TUBE
50	30	0.082	BA/B53	16.5	6.05	11.0	15	160	F153BA823(1)050T	MDC15823(1)50B53P3TUBE
50	30	0.10	BA/B53	16.5	6.05	11.0	15	130	F153BA104(1)050T	MDC15104(1)50B53P3TUBE
50	30	0.12	BA/B53	16.5	6.05	11.0	15	110	F153BA124(1)050T	MDC15124(1)50B53P3TUBE
50	30	0.15	BA/B53	16.5	6.05	11.0	15	85	F153BA154(1)050T	MDC15154(1)50B53P3TUBE
50	30	0.18	BA/B53	16.5	6.05	11.0	15	70	F153BA184(1)050T	MDC15184(1)50B53P3TUBE
50	30	0.22	BA/B53	16.5	6.05	11.0	15	58	F153BA224(1)050T	MDC15224(1)50B53P3TUBE
50	30	0.27	BA/B53	16.5	6.05	11.0	15	47	F153BA274(1)050T	MDC15274(1)50B53P3TUBE
50	30	0.33	BA/B53	16.5	6.05	11.0	15	39	F153BA334(1)050T	MDC15334(1)50B53P3TUBE
50	30	0.39	BA/B53	16.5	6.05	11.0	15	39	F153BA394(1)050T	MDC15394(1)50B53P3TUBE
50	30	0.47	BA/B53	16.5	6.05	11.0	15	30	F153BA474(1)050T	MDC15474(1)50B53P3TUBE
50	30	0.56	BA/B53	16.5	6.05	11.0	15	26	F153BA564(1)050T	MDC15564(1)50B53P3TUBE
50	30	0.68	BA/B53	16.5	6.05	11.0	15	21	F153BA684(1)050T	MDC15684(1)50B53P3TUBE
50	30	0.82	BA/B53	16.5	6.05	11.0	15	18	F153BA824(1)050T	MDC15824(1)50B53P3TUBE
50	30	1.0	BA/B53	16.5	6.05	11.0	15	15	F153BA105(1)050T	MDC15105(1)50B53P3TUBE
50	30	1.2	BA/B53	16.5	6.05	11.0	15	15	F153BA125(1)050T	MDC15125(1)50B53P3TUBE
50	30	1.5	BA/B53	16.5	6.05	11.0	15	13	F153BA155(1)050T	MDC15155(1)50B53P3TUBE
50	30	1.8	BA/B53	16.5	6.05	11.0	15	13	F153BA185(1)050T	MDC15185(1)50B53P3TUBE
50	30	2.2	BA/B53	16.5	6.05	11.0	15	11	F153BA225(1)050T	MDC15225(1)50B53P3TUBE
50	30	2.7	BA/B53	16.5	6.05	11.0	15	11	F153BA275(1)050T	MDC15275(1)50B53P3TUBE
50	30	3.3	BA/B53	16.5	6.05	11.0	15	8	F153BA335(1)050T	MDC15335(1)50B53P3TUBE
50	30	3.9	BA/B53	16.5	6.05	11.0	15	8	F153BA395(1)050T	MDC15395(1)50B53P3TUBE

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Number of leads per side, 3 or 4.

(3) Number of leads per side, 3, 4 or 5.

(4) Number of leads per side, 7 or 8.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz (m Ω)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	4.7	BA/B53	16.5	6.05	11.0	15	6	F153BA475(1)050T	MDC15475(1)50B53P3TUBE
50	30	5.6	BA/B53	16.5	6.05	11.0	15	5	F153BA565(1)050T	MDC15565(1)50B53P3TUBE
50	30	6.8	BA/B53	16.5	6.05	11.0	15	5	F153BA685(1)050T	MDC15685(1)50B53P3TUBE
100	63	0.033	AA/A52	12.2	6.05	11.0	10	390	F153AA333(1)100T	MDC10333(1)100A52P3TUBE
100	63	0.039	AA/A52	12.2	6.05	11.0	10	330	F153AA393(1)100T	MDC10393(1)100A52P3TUBE
100	63	0.047	AA/A52	12.2	6.05	11.0	10	270	F153AA473(1)100T	MDC10473(1)100A52P3TUBE
100	63	0.056	AA/A52	12.2	6.05	11.0	10	230	F153AA563(1)100T	MDC10563(1)100A52P3TUBE
100	63	0.068	AA/A52	12.2	6.05	11.0	10	190	F153AA683(1)100T	MDC10683(1)100A52P3TUBE
100	63	0.082	AA/A52	12.2	6.05	11.0	10	160	F153AA823(1)100T	MDC10823(1)100A52P3TUBE
100	63	0.10	AA/A52	12.2	6.05	11.0	10	130	F153AA104(1)100T	MDC10104(1)100A52P3TUBE
100	63	0.12	AA/A52	12.2	6.05	11.0	10	110	F153AA124(1)100T	MDC10124(1)100A52P3TUBE
100	63	0.15	AA/A52	12.2	6.05	11.0	10	85	F153AA154(1)100T	MDC10154(1)100A52P3TUBE
100	63	0.18	AA/A52	12.2	6.05	11.0	10	70	F153AA184(1)100T	MDC10184(1)100A52P3TUBE
100	63	0.22	AA/A52	12.2	6.05	11.0	10	58	F153AA224(1)100T	MDC10224(1)100A52P3TUBE
100	63	0.27	AA/A52	12.2	6.05	11.0	10	47	F153AA274(1)100T	MDC10274(1)100A52P3TUBE
100	63	0.33	AA/A52	12.2	6.05	11.0	10	39	F153AA334(1)100T	MDC10334(1)100A52P3TUBE
100	63	0.39	AA/A52	12.2	6.05	11.0	10	33	F153AA394(1)100T	MDC10394(1)100A52P3TUBE
100	63	0.47	AA/A52	12.2	6.05	11.0	10	30	F153AA474(1)100T	MDC10474(1)100A52P3TUBE
100	63	0.56	AA/A52	12.2	6.05	11.0	10	26	F153AA564(1)100T	MDC10564(1)100A52P3TUBE
100	63	0.68	AA/A52	12.2	6.05	11.0	10	21	F153AA684(1)100T	MDC10684(1)100A52P3TUBE
100	63	0.82	AA/A52	12.2	6.05	11.0	10	18	F153AA824(1)100T	MDC10824(1)100A52P3TUBE
100	63	1.0	AA/A52	12.2	6.05	11.0	10	15	F153AA105(1)100T	MDC10105(1)100A52P3TUBE
100	63	1.2	AA/A52	12.2	6.05	11.0	10	14	F153AA125(1)100T	MDC10125(1)100A52P3TUBE
100	63	1.5	AA/A52	12.2	6.05	11.0	10	13	F153AA155(1)100T	MDC10155(1)100A52P3TUBE
100	63	1.8	AA/A52	12.2	6.05	11.0	10	12	F153AA185(1)100T	MDC10185(1)100A52P3TUBE
100	63	2.2	AA/A52	12.2	6.05	11.0	10	11	F153AA225(1)100T	MDC10225(1)100A52P3TUBE
100	35	2.7	AA/A52	12.2	6.05	11.0	10	10	F153AA275(1)100T	MDC10275(1)100A52P3TUBE
100	35	3.3	AA/A52	12.2	6.05	11.0	10	8	F153AA335(1)100T	MDC10335(1)100A52P3TUBE
100	35	3.9	AA/A52	12.2	6.05	11.0	10	7	F153AA395(1)100T	MDC10395(1)100A52P3TUBE
100	35	4.7	AA/A54	12.2	6.05	13.5	10	6	F15(2)AA475(1)100T	MDC10475(1)100A54P(2)TUBE
100	35	4.7	AA/A53	12.7	9.0	14.0	10	6	F15(2)AA475(1)100VV687	MDC10475(1)100A53P(2)TR32
100	35	5.6	AA/A55	12.2	6.05	16.5	10	5	F15(3)AA565(1)100T	MDC10565(1)100A55P(3)TUBE
100	63	6.8	AA/A57	12.7	9.0	23.0	10	5	F15(4)AA685(1)100T	MDC10685(1)100A57P(4)TUBE
100	63	8.2	AA/A58	12.7	11.0	23.0	10	4	F15(4)AA825(1)100T	MDC10825(1)100A58P(4)TUBE
100	63	10	AA/A58	12.7	11.0	23.0	10	3	F15(4)AA106(1)100T	MDC10106(1)100A58P(4)TUBE
100	63	0.033	BA/B53	16.5	6.05	11.0	15	390	F153BA333(1)100T	MDC15333(1)100B53P3TUBE
100	63	0.039	BA/B53	16.5	6.05	11.0	15	330	F153BA393(1)100T	MDC15393(1)100B53P3TUBE
100	63	0.047	BA/B53	16.5	6.05	11.0	15	270	F153BA473(1)100T	MDC15473(1)100B53P3TUBE
100	63	0.056	BA/B53	16.5	6.05	11.0	15	230	F153BA563(1)100T	MDC15563(1)100B53P3TUBE
100	63	0.068	BA/B53	16.5	6.05	11.0	15	190	F153BA683(1)100T	MDC15683(1)100B53P3TUBE
100	63	0.082	BA/B53	16.5	6.05	11.0	15	160	F153BA823(1)100T	MDC15823(1)100B53P3TUBE
100	63	0.10	BA/B53	16.5	6.05	11.0	15	130	F153BA104(1)100T	MDC15104(1)100B53P3TUBE
100	63	0.12	BA/B53	16.5	6.05	11.0	15	110	F153BA124(1)100T	MDC15124(1)100B53P3TUBE
100	63	0.15	BA/B53	16.5	6.05	11.0	15	85	F153BA154(1)100T	MDC15154(1)100B53P3TUBE
100	63	0.18	BA/B53	16.5	6.05	11.0	15	70	F153BA184(1)100T	MDC15184(1)100B53P3TUBE
100	63	0.22	BA/B53	16.5	6.05	11.0	15	58	F153BA224(1)100T	MDC15224(1)100B53P3TUBE
100	63	0.27	BA/B53	16.5	6.05	11.0	15	47	F153BA274(1)100T	MDC15274(1)100B53P3TUBE
100	63	0.33	BA/B53	16.5	6.05	11.0	15	39	F153BA334(1)100T	MDC15334(1)100B53P3TUBE
100	63	0.39	BA/B53	16.5	6.05	11.0	15	39	F153BA394(1)100T	MDC15394(1)100B53P3TUBE
100	63	0.47	BA/B53	16.5	6.05	11.0	15	30	F153BA474(1)100T	MDC15474(1)100B53P3TUBE
100	63	0.56	BA/B53	16.5	6.05	11.0	15	26	F153BA564(1)100T	MDC15564(1)100B53P3TUBE
100	63	0.68	BA/B53	16.5	6.05	11.0	15	21	F153BA684(1)100T	MDC15684(1)100B53P3TUBE
100	63	0.82	BA/B53	16.5	6.05	11.0	15	18	F153BA824(1)100T	MDC15824(1)100B53P3TUBE
100	63	1.0	BA/B53	16.5	6.05	11.0	15	15	F153BA105(1)100T	MDC15105(1)100B53P3TUBE
100	63	1.2	BA/B53	16.5	6.05	11.0	15	15	F153BA125(1)100T	MDC15125(1)100B53P3TUBE
100	63	1.5	BA/B53	16.5	6.05	11.0	15	13	F153BA155(1)100T	MDC15155(1)100B53P3TUBE
100	63	1.8	BA/B53	16.5	6.05	11.0	15	13	F153BA185(1)100T	MDC15185(1)100B53P3TUBE
100	63	2.2	BA/B53	16.5	6.05	11.0	15	11	F153BA225(1)100T	MDC15225(1)100B53P3TUBE
100	63	2.7	BA/B53	16.5	6.05	11.0	15	11	F153BA275(1)100T	MDC15275(1)100B53P3TUBE
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	ESR 500 kHz (m Ω)	New KEMET Part Number	Legacy Part Number

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Number of leads per side, 3 or 4.

(3) = Number of leads per side, 3, 4 or 5.

(4) = Number of leads per side, 7 or 8.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz ($\text{m}\Omega$)	New KEMET Part Number	Legacy Part Number
				B	H	L				
100	63	3.3	BA/B53	16.5	6.05	11.0	15	8	F153BA335(1)100T	MDC15335(1)100B53P3TUBE
100	63	3.9	BA/B53	16.5	6.05	11.0	15	8	F153BA395(1)100T	MDC15395(1)100B53P3TUBE
100	35	4.7	BA/B53	16.5	6.05	11.0	15	6	F153BA475(1)100T	MDC15475(1)100B53P3TUBE
100	63	5.6	BA/B55	16.5	6.05	12.2	15	5	F15(2)BA565(1)100T	MDC15565(1)100B55P(2)TUBE
250	160	0.033	AA/A52	12.2	6.05	11.0	10	390	F153AA333(1)250T	MDC10333(1)250A52P3TUBE
250	160	0.039	AA/A52	12.2	6.05	11.0	10	330	F153AA393(1)250T	MDC10393(1)250A52P3TUBE
250	160	0.047	AA/A52	12.2	6.05	11.0	10	270	F153AA473(1)250T	MDC10473(1)250A52P3TUBE
250	160	0.056	AA/A52	12.2	6.05	11.0	10	230	F153AA563(1)250T	MDC10563(1)250A52P3TUBE
250	160	0.068	AA/A52	12.2	6.05	11.0	10	190	F153AA683(1)250T	MDC10683(1)250A52P3TUBE
250	160	0.082	AA/A52	12.2	6.05	11.0	10	160	F153AA823(1)250T	MDC10823(1)250A52P3TUBE
250	160	0.10	AA/A52	12.2	6.05	11.0	10	130	F153AA104(1)250T	MDC10104(1)250A52P3TUBE
250	160	0.12	AA/A52	12.2	6.05	11.0	10	130	F153AA124(1)250T	MDC10124(1)250A52P3TUBE
250	160	0.15	AA/A52	12.2	6.05	11.0	10	130	F153AA154(1)250T	MDC10154(1)250A52P3TUBE
250	160	0.18	AA/A52	12.2	6.05	11.0	10	70	F153AA184(1)250T	MDC10184(1)250A52P3TUBE
250	160	0.22	AA/A52	12.2	6.05	11.0	10	58	F153AA224(1)250T	MDC10224(1)250A52P3TUBE
250	160	0.27	AA/A52	12.2	6.05	11.0	10	47	F153AA274(1)250T	MDC10274(1)250A52P3TUBE
250	160	0.33	AA/A52	12.2	6.05	11.0	10	39	F153AA334(1)250T	MDC10334(1)250A52P3TUBE
250	160	0.39	AA/A52	12.2	6.05	11.0	10	33	F153AA394(1)250T	MDC10394(1)250A52P3TUBE
250	160	0.47	AA/A52	12.2	6.05	11.0	10	30	F153AA474(1)250T	MDC10474(1)250A52P3TUBE
250	160	0.56	AA/A54	12.2	6.05	13.5	10	26	F15(2)AA564(1)250T	MDC10564(1)250A54P(2)TUBE
250	160	0.68	AA/A55	12.2	6.05	16.5	10	21	F15(3)AA684(1)250T	MDC10684(1)250A55P(3)TUBE
250	160	0.82	AA/A57	12.7	9.0	23.0	10	18	F15(4)AA824(1)250T	MDC10824(1)250A57P(4)TUBE
250	160	1.0	AA/A57	12.7	9.0	23.0	10	15	F15(4)AA105(1)250T	MDC10105(1)250A57P(4)TUBE
250	160	1.2	AA/A58	12.7	11.0	23.0	10	14	F15(4)AA125(1)250T	MDC10125(1)250A58P(4)TUBE
250	160	1.5	AA/A58	12.7	11.0	23.0	10	13	F15(4)AA155(1)250T	MDC10155(1)250A58P(4)TUBE
250	160	0.033	BA/B53	16.5	6.05	11.0	15	390	F153BA333(1)250T	MDC15333(1)250B53P3TUBE
250	160	0.039	BA/B53	16.5	6.05	11.0	15	330	F153BA393(1)250T	MDC15393(1)250B53P3TUBE
250	160	0.047	BA/B53	16.5	6.05	11.0	15	270	F153BA473(1)250T	MDC15473(1)250B53P3TUBE
250	160	0.056	BA/B53	16.5	6.05	11.0	15	230	F153BA563(1)250T	MDC15563(1)250B53P3TUBE
250	160	0.068	BA/B53	16.5	6.05	11.0	15	190	F153BA683(1)250T	MDC15683(1)250B53P3TUBE
250	160	0.082	BA/B53	16.5	6.05	11.0	15	160	F153BA823(1)250T	MDC15823(1)250B53P3TUBE
250	160	0.10	BA/B53	16.5	6.05	11.0	15	130	F153BA104(1)250T	MDC15104(1)250B53P3TUBE
250	160	0.12	BA/B53	16.5	6.05	11.0	15	110	F153BA124(1)250T	MDC15124(1)250B53P3TUBE
250	160	0.15	BA/B53	16.5	6.05	11.0	15	85	F153BA154(1)250T	MDC15154(1)250B53P3TUBE
250	160	0.18	BA/B53	16.5	6.05	11.0	15	70	F153BA184(1)250T	MDC15184(1)250B53P3TUBE
250	160	0.22	BA/B53	16.5	6.05	11.0	15	58	F153BA224(1)250T	MDC15224(1)250B53P3TUBE
250	160	0.27	BA/B53	16.5	6.05	11.0	15	47	F153BA274(1)250T	MDC15274(1)250B53P3TUBE
250	160	0.33	BA/B53	16.5	6.05	11.0	15	39	F153BA334(1)250T	MDC15334(1)250B53P3TUBE
250	160	0.39	BA/B53	16.5	6.05	11.0	15	39	F153BA394(1)250T	MDC15394(1)250B53P3TUBE
250	160	0.47	BA/B53	16.5	6.05	11.0	15	30	F153BA474(1)250T	MDC15474(1)250B53P3TUBE
250	160	0.56	BA/B53	16.5	6.05	11.0	15	26	F153BA564(1)250T	MDC15564(1)250B53P3TUBE
250	160	0.68	BA/B53	16.5	6.05	11.0	15	21	F153BA684(1)250T	MDC15684(1)250B53P3TUBE
400	200	0.033	AA/A52	12.2	6.05	11.0	10	390	F153AA333(1)400T	MDC10333(1)400A52P3TUBE
400	200	0.039	AA/A52	12.2	6.05	11.0	10	330	F153AA393(1)400T	MDC10393(1)400A52P3TUBE
400	200	0.047	AA/A52	12.2	6.05	11.0	10	270	F153AA473(1)400T	MDC10473(1)400A52P3TUBE
400	200	0.056	AA/A52	12.2	6.05	11.0	10	230	F153AA563(1)400T	MDC10563(1)400A52P3TUBE
400	200	0.068	AA/A52	12.2	6.05	11.0	10	190	F153AA683(1)400T	MDC10683(1)400A52P3TUBE
400	200	0.082	AA/A52	12.2	6.05	11.0	10	160	F153AA823(1)400T	MDC10823(1)400A52P3TUBE
400	200	0.10	AA/A52	12.2	6.05	11.0	10	130	F153AA104(1)400T	MDC10104(1)400A52P3TUBE
400	200	0.12	AA/A52	12.2	6.05	11.0	10	110	F153AA124(1)400T	MDC10124(1)400A52P3TUBE
400	200	0.15	AA/A52	12.2	6.05	11.0	10	85	F153AA154(1)400T	MDC10154(1)400A52P3TUBE
400	200	0.18	AA/A52	12.2	6.05	11.0	10	70	F153AA184(1)400T	MDC10184(1)400A52P3TUBE
400	200	0.22	AA/A57	12.7	9.0	23.0	10	58	F15(4)AA224(1)400T	MDC10224(1)400A57P(4)TUBE
400	200	0.27	AA/A57	12.7	9.0	23.0	10	47	F15(4)AA274(1)400T	MDC10274(1)400A57P(4)TUBE
400	200	0.33	AA/A57	12.7	9.0	23.0	10	39	F15(4)AA334(1)400T	MDC10334(1)400A57P(4)TUBE
400	200	0.39	AA/A58	12.7	11.0	23.0	10	33	F15(4)AA394(1)400T	MDC10394(1)400A58P(4)TUBE
400	200	0.47	AA/A58	12.7	11.0	23.0	10	30	F15(4)AA474(1)400T	MDC10474(1)400A58P(4)TUBE
400	200	0.033	BA/B53	16.5	6.05	11.0	15	390	F153BA333(1)400T	MDC15333(1)400B53P3TUBE
400	200	0.039	BA/B53	16.5	6.05	11.0	15	330	F153BA393(1)400T	MDC15393(1)400B53P3TUBE
VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	ESR 500 kHz ($\text{m}\Omega$)	New KEMET Part Number	Legacy Part Number

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Number of leads per side, 3 or 4.

(3) = Number of leads per side, 3, 4 or 5.

(4) = Number of leads per side, 7 or 8.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz ($\text{m}\Omega$)	New KEMET Part Number	Legacy Part Number
				B	H	L				
400	200	0.047	BA/B53	16.5	6.05	11.0	15	270	F153BA473(1)400T	MDC15473(1)400B53P3TUBE
400	200	0.056	BA/B53	16.5	6.05	11.0	15	230	F153BA563(1)400T	MDC15563(1)400B53P3TUBE
400	200	0.068	BA/B53	16.5	6.05	11.0	15	190	F153BA683(1)400T	MDC15683(1)400B53P3TUBE
400	200	0.082	BA/B53	16.5	6.05	11.0	15	160	F153BA823(1)400T	MDC15823(1)400B53P3TUBE
400	200	0.10	BA/B53	16.5	6.05	11.0	15	130	F153BA104(1)400T	MDC15104(1)400B53P3TUBE
400	200	0.12	BA/B53	16.5	6.05	11.0	15	110	F153BA124(1)400T	MDC15124(1)400B53P3TUBE
400	200	0.15	BA/B53	16.5	6.05	11.0	15	85	F153BA154(1)400T	MDC15154(1)400B53P3TUBE
400	200	0.18	BA/B53	16.5	6.05	11.0	15	70	F153BA184(1)400T	MDC15184(1)400B53P3TUBE
400	200	0.22	BA/B53	16.5	6.05	11.0	15	58	F153BA224(1)400T	MDC15224(1)400B53P3TUBE
400	200	0.27	BA/B53	16.5	6.05	11.0	15	47	F153BA274(1)400T	MDC15274(1)400B53P3TUBE
400	200	0.33	BA/B55	16.5	6.05	12.2	15	39	F15(2)BA334(1)400T	MDC15334(1)400B55P(2)TUBE
630	220	0.033	AA/A52	12.2	6.05	11.0	10	390	F153AA333(1)630T	MDC10333(1)630A52P3TUBE
630	220	0.039	AA/A52	12.2	6.05	11.0	10	330	F153AA393(1)630T	MDC10393(1)630A52P3TUBE
630	220	0.047	AA/A52	12.2	6.05	11.0	10	270	F153AA473(1)630T	MDC10473(1)630A52P3TUBE
630	220	0.056	AA/A52	12.2	6.05	11.0	10	230	F153AA563(1)630T	MDC10563(1)630A52P3TUBE
630	220	0.068	AA/A54	12.2	6.05	13.5	10	190	F15(2)AA683(1)630T	MDC10683(1)630A54P(2)TUBE
630	220	0.082	AA/A58	12.7	11.0	23.0	10	160	F15(4)AA823(1)630T	MDC10823(1)630A58P(4)TUBE
630	220	0.10	AA/A58	12.7	11.0	23.0	10	130	F15(4)AA104(1)630T	MDC10104(1)630A58P(4)TUBE
630	220	0.12	AA/A58	12.7	11.0	23.0	10	110	F15(4)AA124(1)630T	MDC10124(1)630A58P(4)TUBE
630	220	0.15	AA/A58	12.7	11.0	23.0	10	85	F15(4)AA154(1)630T	MDC10154(1)630A58P(4)TUBE
630	220	0.18	AA/A58	12.7	11.0	23.0	10	70	F15(4)AA184(1)630T	MDC10184(1)630A58P(4)TUBE
630	220	0.033	BA/B53	16.5	6.05	11.0	15	390	F153BA333(1)630T	MDC15333(1)630B53P3TUBE
630	220	0.039	BA/B53	16.5	6.05	11.0	15	330	F153BA393(1)630T	MDC15393(1)630B53P3TUBE
630	220	0.047	BA/B53	16.5	6.05	11.0	15	270	F153BA473(1)630T	MDC15473(1)630B53P3TUBE
630	220	0.056	BA/B53	16.5	6.05	11.0	15	230	F153BA563(1)630T	MDC15563(1)630B53P3TUBE
630	220	0.068	BA/B53	16.5	6.05	11.0	15	190	F153BA683(1)630T	MDC15683(1)630B53P3TUBE
630	220	0.082	BA/B53	16.5	6.05	11.0	15	160	F153BA823(1)630T	MDC15823(1)630B53P3TUBE
630	220	0.10	BA/B53	16.5	6.05	11.0	15	130	F153BA104(1)630T	MDC15104(1)630B53P3TUBE
VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	ESR 500 kHz ($\text{m}\Omega$)	New KEMET Part Number	Legacy Part Number

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) = Number of leads per side, 3 or 4.

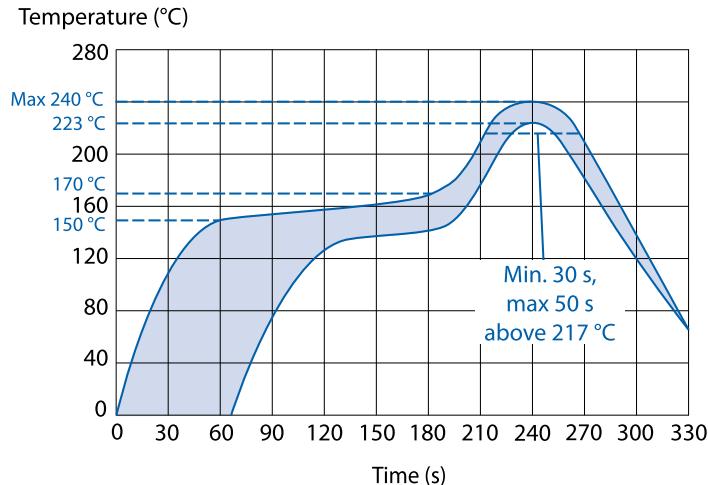
(3) = Number of leads per side, 3, 4 or 5.

(4) = Number of leads per side, 7 or 8.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 240°C.

A lead-free soldering process for this series is in development. Please contact KEMET for details.



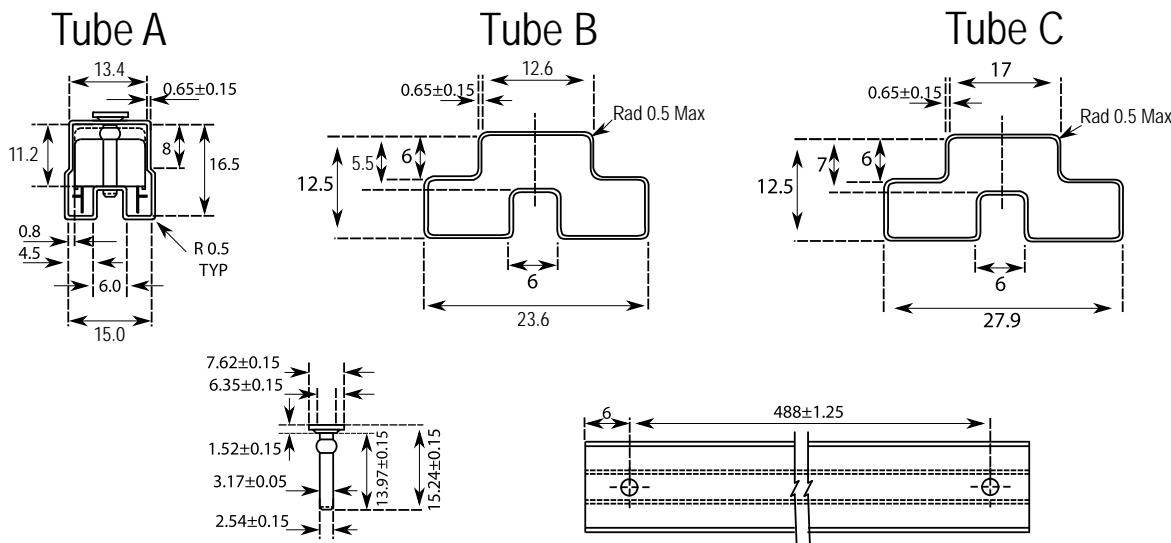
Marking

- KEMET
- Capacitance
- Capacitance tolerance code
- Rated voltage
- Capacitor family code MDC

Packaging Quantities

Size Code	Lead Spacing	Base (mm)	Height (mm)	Length (mm)	Bulk	Reel
A52	10.0	12.2	6.05	11.0	43	
A53		12.7	9.0	14.0	34	200
A54		12.2	6.05	13.5	35	
A55		12.2	6.05	16.5	28	
A57		12.7	9.0	23.0	21	
A58		12.7	11.0	23.0	21	
B53	15.0	16.5	6.05	11.0	43	
B55		16.5	6.05	12.2	39	

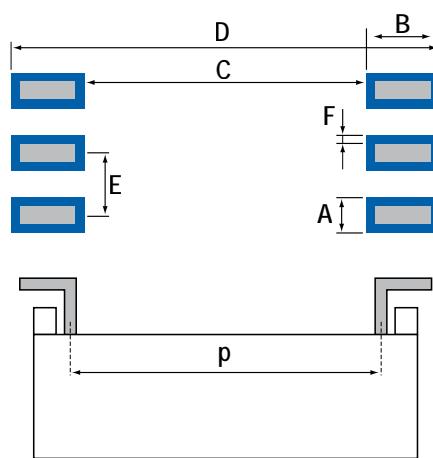
Tube Packaging



Size Code	Dimensions in mm	Tube
A52	10.0 – 12.2 x 6.05 x 11.0	Tube B
A53	10.0 – 12.7 x 9.0 x 14.0	Tube A
A54	10.0 – 12.2 x 6.05 x 13.5	Tube B
A55	10.0 – 12.2 x 6.05 x 16.5	Tube B
A57	10.0 – 12.7 x 9.0 x 23.0	Tube A
A58	10.0 – 12.7 x 11.0 x 23.0	Tube A
B53	15.0 – 16.5 x 6.05 x 11.0	Tube C
B55	15.0 – 16.5 x 6.05 x 12.2	Tube C

Landing

Size	Dimensions in mm						
	p	A	B	C	D	E	F
A52	10	1	2	9.15	13.15	2.54	0.25
A53	10	1	2	9.15	13.15	2.54	0.25
A54	10	1	2	9.15	13.15	2.54	0.25
A55	10	1	2	9.15	13.15	2.54	0.25
A57	10	1	2	9.15	13.15	2.54	0.25
A58	10	1	2	9.15	13.15	2.54	0.25
B53	15	1	2	14.15	18.15	2.54	0.25
B55	15	1	2	14.15	18.15	2.54	0.25



MDS Series Dual In-Line Low Profile, 50 – 630 VDC, High Current

Overview

Dual in-line (DIL) metallized polyester (PET) film capacitor. Encapsulation in self-extinguishing material meeting the requirements of UL 94 V-0.

Applications

Typical applications include high frequency switched-mode power supplies, DC/DC converters and input/output filtering.

Benefits

- Rated voltage: 50 – 630 VDC
- Rated voltage: 30 – 220 VAC
- Capacitance range: 0.033 – 6.8 µF
- Capacitance tolerance: ±5%, ±10%, other tolerances on request
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



Legacy Part Number System

MDS	10	333	K	50	A52	P3	TUBE
Series	Lead Spacing (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Number of Leads per Side	Packaging Code
Dual In-Line, Metallized Polyester	10 15	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5 K = ±10% Other tolerances on request	50 100 250 400 630	See Dimension Table	P3 = 3 leads P4 = 4 leads P5 = 5 leads	See Ordering Options Table

New KEMET Part Number System

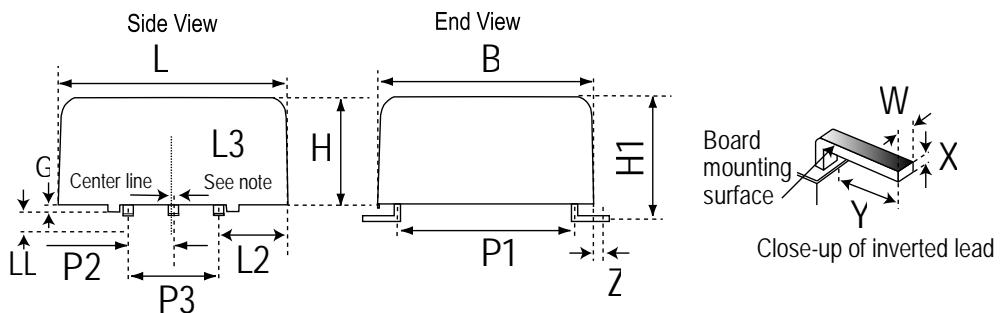
F	17	3	A	A	333	K	050	T
Capacitor Class	Series	Number of Leads per Side	Lead Spacing (mm)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film	Dual In-Line, Metallized Polyester	3 = 3 leads 4 = 4 leads 5 = 5 leads	A = 10 B = 15	A = Standard box size	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5 K = ±10% Other tolerances on request	050 = 50 100 = 100 250 = 250 400 = 400 630 = 630	See Ordering Options Table

One world. One KEMET

Ordering Options Table

Packaging Type	KEMET Packaging Code	Legacy Packaging Code
Standard Packaging Options		
Bulk (Tube)	T	TUBE
Case Size A53 Tape & Reel (Standard Reel)	VV687	TR32

Dimensions – Millimeters



Legacy Size Code	Leads per Side	P1	P2	P3 ⁽¹⁾	B	H	L	H1	L2	L3 ⁽²⁾	W	X	Y	Z	LL
		+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.2	+/-0.4	+/-0.2	Maximum	+/-0.05	+/-0.05	+/-0.2	Nominal	+/-0.2
A52	3	10.0	2.54	5.08	12.2	6.05	11.0	7.75	2.96	0.2	0.5	0.35	1.5	0.25	1.7
A53	3	10.0	2.54	5.08	12.7	9.0	14.0	10.5	4.46	0.2	0.5	0.35	1.5	0	1.5
A54	3	10.0	2.54	5.08	12.2	6.05	13.5	7.75	4.21	0.2	0.5	0.35	1.5	0.25	1.7
A55	3	10.0	2.54	5.08	12.2	6.05	16.5	7.75	5.71	0.2	0.5	0.35	1.5	0.25	1.7
B53	3	15.0	2.54	5.08	16.5	6.05	11.0	7.75	2.96	0.2	0.5	0.35	1.5	0.6	1.7
B55	3	15.0	2.54	5.08	16.5	6.05	12.2	7.75	3.56	0.2	0.5	0.35	1.5	0.6	1.7
A53	4	10.0	2.54	7.62	12.7	9.0	14.0	10.5	3.19	0.2	0.5	0.35	1.5	0	1.5
A54	4	10.0	2.54	7.62	12.2	6.05	13.5	7.75	2.94	0.2	0.5	0.35	1.5	0.25	1.7
A55	4	10.0	2.54	7.62	12.2	6.05	16.5	7.75	4.44	0.2	0.5	0.35	1.5	0.25	1.7
B55	4	15.0	2.54	7.62	16.5	6.05	12.2	7.75	2.29	0.2	0.5	0.35	1.5	0.6	1.7
A55	5	10.0	2.54	10.16	12.2	6.05	16.5	7.75	3.17	0.2	0.5	0.35	1.5	0.25	1.7

Drawing shows MDS with three leads per side. Similar dimensional requirements apply to the 4, 5, 7, and 8 leads per side configurations.

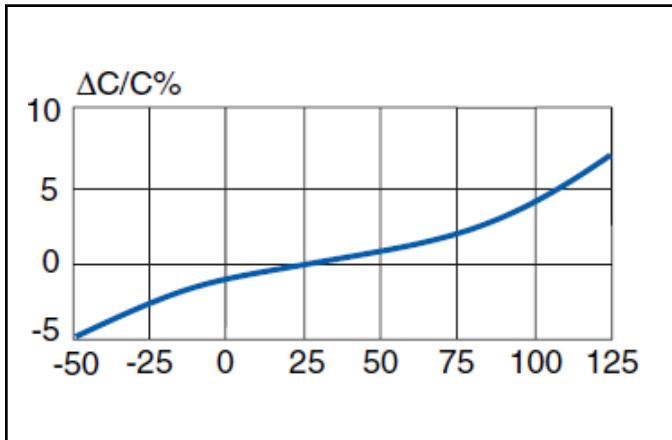
(1) P3 represents the cumulative tolerance of all leads.

(2) L3 represents the extent to which the center line of the leads misaligns with the center line of the body. Dimension shown is the maximum such misalignment allowed.

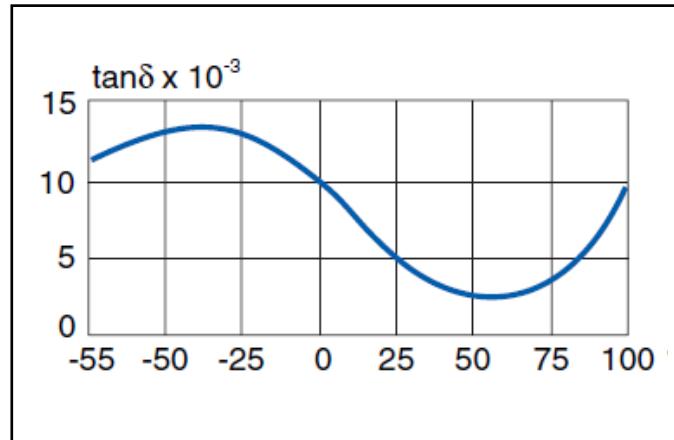
Performance Characteristics

Rated Voltage (VDC)	50	100	250	400	630
Rated Voltage (VAC)	30	63	160	200	220
Capacitance Range (μF)	0.033 – 15	0.033 – 10	0.033 – 1.5	0.033 – 0.47	0.033 – 0.18
Capacitance Tolerance	$\pm 5\%$, $\pm 10\%$, other tolerances on request				
Category Temperature Range	-55°C to +125°C				
Rated Temperature	+85°C				
Voltage Derating	The rated voltage is decreased with 1.25%/°C from +85°C				
Climatic Category	55/125/56				
Test Voltage	1.6 x V_R , 60 seconds				
Insulation Resistance	Measured at +20°C According to IEC 60384-2				
	Minimum Value Between Terminals				
		$C \leq 0.33 \mu\text{F}$	$C > 0.33 \mu\text{F}$		
	$V_R \leq 100$	15,000 MΩ	5,000 MΩ • μF		
Dissipation Factor	$V_R > 100$	30,000 MΩ	10,000 MΩ • μF		
	Maximum Values at +23°C				
		$C \leq 0.1 \mu\text{F}$	$0.1 < C < 3.3 \mu\text{F}$	$3.3 \leq C \leq 6.8 \mu\text{F}$	
	1 kHz	0.8%	0.8%	0.8%	
	10 kHz	1.5%	1.5%	1.5%	
	100 kHz	2.5%	5.0%		
Self Inductance	Approximately 4 nH				

Typical Capacitance vs. Temperature at 1 kHz



Typical Dissipation Factor vs. Temperature at 1 kHz



Maximum RMS Voltage V_{rms} (V) vs. Frequency

Value	Rated Voltage	Case Size	1 kHz	10 kHz	100 kHz	500 kHz	1 MHz
1.0 μ F	250 V	A57	150.0	36.0	9.2	2.9	1.3
2.2 μ F	100 V	A52	50.0	25.0	5.0	1.2	0.6
3.9 μ F	100 V	A52	50.0	18.0	4.0	1.0	0.3
4.7 μ F	100 V	A54	50.0	16.0	3.5	0.7	0.2
6.8 μ F	100 V	A57	50.0	15.5	2.2	0.5	0.2

Maximum RMS Current I_{rms} (A) vs. Frequency

Value	Rated Voltage	Case Size	1 kHz	10 kHz	100 kHz	500 kHz	1 MHz
1.0 μ F	250 V	A57	1.0	2.2	5.5	9.0	10.0
2.2 μ F	100 V	A52	1.5	2.3	6.0	7.5	10.0
3.9 μ F	100 V	A52	2.0	4.0	10.0	11.0	11.5
4.7 μ F	100 V	A54	2.0	4.5	10.0	12.5	12.5
6.8 μ F	100 V	A57	3.0	6.0	11.0	13.0	13.5

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.



RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz (m Ω)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.033	AA/50A	12.2	6.05	11.0	10	390	F173AA333(1)050T	MDS10333(1)50A52P3TUBE
50	30	0.039	AA/50A	12.2	6.05	11.0	10	330	F173AA393(1)050T	MDS10393(1)50A52P3TUBE
50	30	0.047	AA/50A	12.2	6.05	11.0	10	270	F173AA473(1)050T	MDS10473(1)50A52P3TUBE
50	30	0.056	AA/50A	12.2	6.05	11.0	10	230	F173AA563(1)050T	MDS10563(1)50A52P3TUBE
50	30	0.068	AA/50A	12.2	6.05	11.0	10	190	F173AA683(1)050T	MDS10683(1)50A52P3TUBE
50	30	0.082	AA/50A	12.2	6.05	11.0	10	160	F173AA823(1)050T	MDS10823(1)50A52P3TUBE
50	30	0.10	AA/50A	12.2	6.05	11.0	10	130	F173AA104(1)050T	MDS10104(1)50A52P3TUBE
50	30	0.12	AA/50A	12.2	6.05	11.0	10	110	F173AA124(1)050T	MDS10124(1)50A52P3TUBE
50	30	0.15	AA/50A	12.2	6.05	11.0	10	85	F173AA154(1)050T	MDS10154(1)50A52P3TUBE
50	30	0.18	AA/50A	12.2	6.05	11.0	10	70	F173AA184(1)050T	MDS10184(1)50A52P3TUBE
50	30	0.22	AA/50A	12.2	6.05	11.0	10	58	F173AA224(1)050T	MDS10224(1)50A52P3TUBE
50	30	0.27	AA/50A	12.2	6.05	11.0	10	47	F173AA274(1)050T	MDS10274(1)50A52P3TUBE
50	30	0.33	AA/50A	12.2	6.05	11.0	10	39	F173AA334(1)050T	MDS10334(1)50A52P3TUBE
50	30	0.39	AA/50A	12.2	6.05	11.0	10	33	F173AA394(1)050T	MDS10394(1)50A52P3TUBE
50	30	0.47	AA/50A	12.2	6.05	11.0	10	30	F173AA474(1)050T	MDS10474(1)50A52P3TUBE
50	30	0.56	AA/50A	12.2	6.05	11.0	10	26	F173AA564(1)050T	MDS10564(1)50A52P3TUBE
50	30	0.68	AA/50A	12.2	6.05	11.0	10	21	F173AA684(1)050T	MDS10684(1)50A52P3TUBE
50	30	0.82	AA/50A	12.2	6.05	11.0	10	18	F173AA824(1)050T	MDS10824(1)50A52P3TUBE
50	30	1.0	AA/50A	12.2	6.05	11.0	10	15	F173AA105(1)050T	MDS10105(1)50A52P3TUBE
50	30	1.2	AA/50A	12.2	6.05	11.0	10	14	F173AA125(1)050T	MDS10125(1)50A52P3TUBE
50	30	1.5	AA/50A	12.2	6.05	11.0	10	13	F173AA155(1)050T	MDS10155(1)50A52P3TUBE
50	30	1.8	AA/50A	12.2	6.05	11.0	10	12	F173AA185(1)050T	MDS10185(1)50A52P3TUBE
50	30	2.2	AA/50A	12.2	6.05	11.0	10	11	F173AA225(1)050T	MDS10225(1)50A52P3TUBE
50	30	2.7	AA/50A	12.2	6.05	11.0	10	10	F173AA275(1)050T	MDS10275(1)50A52P3TUBE
50	30	3.3	AA/50A	12.2	6.05	11.0	10	8	F173AA335(1)050T	MDS10335(1)50A52P3TUBE
50	30	3.9	AA/50A	12.2	6.05	11.0	10	7	F173AA395(1)050T	MDS10395(1)50A52P3TUBE
50	30	4.7	AA/50A	12.2	6.05	11.0	10	6	F173AA475(1)050T	MDS10475(1)50A52P3TUBE
50	30	5.6	AA/50A	12.2	6.05	13.5	10	5	F17(2)AA565(1)050T	MDS10565(1)50A54P(2)TUBE
50	30	6.8	AA/50A	12.2	6.05	16.5	10	5	F17(3)AA685(1)050T	MDS10685(1)50A55P(3)TUBE
50	30	0.033	BA/50B	16.5	6.05	11.0	15	390	F173BA333(1)050T	MDS15333(1)50B53P3TUBE
50	30	0.039	BA/50B	16.5	6.05	11.0	15	330	F173BA393(1)050T	MDS15393(1)50B53P3TUBE
50	30	0.047	BA/50B	16.5	6.05	11.0	15	270	F173BA473(1)050T	MDS15473(1)50B53P3TUBE
50	30	0.056	BA/50B	16.5	6.05	11.0	15	230	F173BA563(1)050T	MDS15563(1)50B53P3TUBE
50	30	0.068	BA/50B	16.5	6.05	11.0	15	190	F173BA683(1)050T	MDS15683(1)50B53P3TUBE
50	30	0.082	BA/50B	16.5	6.05	11.0	15	160	F173BA823(1)050T	MDS15823(1)50B53P3TUBE
50	30	0.10	BA/50B	16.5	6.05	11.0	15	130	F173BA104(1)050T	MDS15104(1)50B53P3TUBE
50	30	0.12	BA/50B	16.5	6.05	11.0	15	110	F173BA124(1)050T	MDS15124(1)50B53P3TUBE
50	30	0.15	BA/50B	16.5	6.05	11.0	15	85	F173BA154(1)050T	MDS15154(1)50B53P3TUBE
50	30	0.18	BA/50B	16.5	6.05	11.0	15	70	F173BA184(1)050T	MDS15184(1)50B53P3TUBE
50	30	0.22	BA/50B	16.5	6.05	11.0	15	58	F173BA224(1)050T	MDS15224(1)50B53P3TUBE
50	30	0.27	BA/50B	16.5	6.05	11.0	15	47	F173BA274(1)050T	MDS15274(1)50B53P3TUBE
50	30	0.33	BA/50B	16.5	6.05	11.0	15	39	F173BA334(1)050T	MDS15334(1)50B53P3TUBE
50	30	0.39	BA/50B	16.5	6.05	11.0	15	39	F173BA394(1)050T	MDS15394(1)50B53P3TUBE
50	30	0.47	BA/50B	16.5	6.05	11.0	15	30	F173BA474(1)050T	MDS15474(1)50B53P3TUBE
50	30	0.56	BA/50B	16.5	6.05	11.0	15	26	F173BA564(1)050T	MDS15564(1)50B53P3TUBE
50	30	0.68	BA/50B	16.5	6.05	11.0	15	21	F173BA684(1)050T	MDS15684(1)50B53P3TUBE
50	30	0.82	BA/50B	16.5	6.05	11.0	15	18	F173BA824(1)050T	MDS15824(1)50B53P3TUBE
50	30	1.0	BA/50B	16.5	6.05	11.0	15	15	F173BA105(1)050T	MDS15105(1)50B53P3TUBE
50	30	1.2	BA/50B	16.5	6.05	11.0	15	13	F173BA125(1)050T	MDS15125(1)50B53P3TUBE
50	30	1.5	BA/50B	16.5	6.05	11.0	15	13	F173BA155(1)050T	MDS15155(1)50B53P3TUBE
50	30	1.8	BA/50B	16.5	6.05	11.0	15	13	F173BA185(1)050T	MDS15185(1)50B53P3TUBE
50	30	2.2	BA/50B	16.5	6.05	11.0	15	11	F173BA225(1)050T	MDS15225(1)50B53P3TUBE
50	30	2.7	BA/50B	16.5	6.05	11.0	15	13	F173BA275(1)050T	MDS15275(1)50B53P3TUBE
50	30	3.3	BA/50B	16.5	6.05	11.0	15	8	F173BA335(1)050T	MDS15335(1)50B53P3TUBE
50	30	3.9	BA/50B	16.5	6.05	11.0	15	13	F173BA395(1)050T	MDS15395(1)50B53P3TUBE
50	30	4.7	BA/50B	16.5	6.05	11.0	15	6	F173BA475(1)050T	MDS15475(1)50B53P3TUBE
50	30	5.6	BA/50B	16.5	6.05	11.0	15	5	F173BA565(1)050T	MDS15565(1)50B53P3TUBE
50	30	6.8	BA/50B	16.5	6.05	11.0	15	5	F173BA685(1)050T	MDS15685(1)50B53P3TUBE

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) = Number of leads per side, 3 or 4.

(3) = Number of leads per side, 3, 4 or 5.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz (m Ω)	New KEMET Part Number	Legacy Part Number
				B	H	L				
100	63	0.033	AA/00A	12.2	6.05	11.0	10	390	F173AA333(1)100T	MDS10333(1)100A52P3TUBE
100	63	0.039	AA/00A	12.2	6.05	11.0	10	330	F173AA393(1)100T	MDS10393(1)100A52P3TUBE
100	63	0.047	AA/00A	12.2	6.05	11.0	10	270	F173AA473(1)100T	MDS10473(1)100A52P3TUBE
100	63	0.056	AA/00A	12.2	6.05	11.0	10	230	F173AA563(1)100T	MDS10563(1)100A52P3TUBE
100	63	0.068	AA/00A	12.2	6.05	11.0	10	190	F173AA683(1)100T	MDS10683(1)100A52P3TUBE
100	63	0.082	AA/00A	12.2	6.05	11.0	10	160	F173AA823(1)100T	MDS10823(1)100A52P3TUBE
100	63	0.10	AA/00A	12.2	6.05	11.0	10	130	F173AA104(1)100T	MDS10104(1)100A52P3TUBE
100	63	0.12	AA/00A	12.2	6.05	11.0	10	110	F173AA124(1)100T	MDS10124(1)100A52P3TUBE
100	63	0.15	AA/00A	12.2	6.05	11.0	10	85	F173AA154(1)100T	MDS10154(1)100A52P3TUBE
100	63	0.18	AA/00A	12.2	6.05	11.0	10	70	F173AA184(1)100T	MDS10184(1)100A52P3TUBE
100	63	0.22	AA/00A	12.2	6.05	11.0	10	58	F173AA224(1)100T	MDS10224(1)100A52P3TUBE
100	63	0.27	AA/00A	12.2	6.05	11.0	10	47	F173AA274(1)100T	MDS10274(1)100A52P3TUBE
100	63	0.33	AA/00A	12.2	6.05	11.0	10	39	F173AA334(1)100T	MDS10334(1)100A52P3TUBE
100	63	0.39	AA/00A	12.2	6.05	11.0	10	33	F173AA394(1)100T	MDS10394(1)100A52P3TUBE
100	63	0.47	AA/00A	12.2	6.05	11.0	10	30	F173AA474(1)100T	MDS10474(1)100A52P3TUBE
100	63	0.56	AA/00A	12.2	6.05	11.0	10	26	F173AA564(1)100T	MDS10564(1)100A52P3TUBE
100	63	0.68	AA/00A	12.2	6.05	11.0	10	21	F173AA684(1)100T	MDS10684(1)100A52P3TUBE
100	63	0.82	AA/00A	12.2	6.05	11.0	10	18	F173AA824(1)100T	MDS10824(1)100A52P3TUBE
100	63	1.0	AA/00A	12.2	6.05	11.0	10	15	F173AA105(1)100T	MDS10105(1)100A52P3TUBE
100	63	1.2	AA/00A	12.2	6.05	11.0	10	14	F173AA125(1)100T	MDS10125(1)100A52P3TUBE
100	63	1.5	AA/00A	12.2	6.05	11.0	10	13	F173AA155(1)100T	MDS10155(1)100A52P3TUBE
100	63	1.8	AA/00A	12.2	6.05	11.0	10	12	F173AA185(1)100T	MDS10185(1)100A52P3TUBE
100	63	2.2	AA/00A	12.2	6.05	11.0	10	11	F173AA225(1)100T	MDS10225(1)100A52P3TUBE
100	35	2.7	AA/00A	12.2	6.05	11.0	10	10	F173AA275(1)100T	MDS10275(1)100A52P3TUBE
100	35	3.3	AA/00A	12.2	6.05	11.0	10	8	F173AA335(1)100T	MDS10335(1)100A52P3TUBE
100	35	3.9	AA/00A	12.2	6.05	11.0	10	7	F173AA395(1)100T	MDS10395(1)100A52P3TUBE
100	35	4.7	AA/00A	12.2	6.05	13.5	10	6	F17(2)AA475(1)100T	MDS10475(1)100A54P(2)TUBE
100	35	5.6	AA/00A	12.2	6.05	16.5	10	5	F17(3)AA565(1)100T	MDS10565(1)100A55P(3)TUBE
100	63	0.033	BA/00B	16.5	6.05	11.0	15	390	F173BA333(1)100T	MDS15333(1)100B53P3TUBE
100	63	0.039	BA/00B	16.5	6.05	11.0	15	330	F173BA393(1)100T	MDS15393(1)100B53P3TUBE
100	63	0.047	BA/00B	16.5	6.05	11.0	15	270	F173BA473(1)100T	MDS15473(1)100B53P3TUBE
100	63	0.056	BA/00B	16.5	6.05	11.0	15	230	F173BA563(1)100T	MDS15563(1)100B53P3TUBE
100	63	0.068	BA/00B	16.5	6.05	11.0	15	190	F173BA683(1)100T	MDS15683(1)100B53P3TUBE
100	63	0.082	BA/00B	16.5	6.05	11.0	15	160	F173BA823(1)100T	MDS15823(1)100B53P3TUBE
100	63	0.10	BA/00B	16.5	6.05	11.0	15	130	F173BA104(1)100T	MDS15104(1)100B53P3TUBE
100	63	0.12	BA/00B	16.5	6.05	11.0	15	110	F173BA124(1)100T	MDS15124(1)100B53P3TUBE
100	63	0.15	BA/00B	16.5	6.05	11.0	15	85	F173BA154(1)100T	MDS15154(1)100B53P3TUBE
100	63	0.18	BA/00B	16.5	6.05	11.0	15	70	F173BA184(1)100T	MDS15184(1)100B53P3TUBE
100	63	0.22	BA/00B	16.5	6.05	11.0	15	58	F173BA224(1)100T	MDS15224(1)100B53P3TUBE
100	63	0.27	BA/00B	16.5	6.05	11.0	15	47	F173BA274(1)100T	MDS15274(1)100B53P3TUBE
100	63	0.33	BA/00B	16.5	6.05	11.0	15	39	F173BA334(1)100T	MDS15334(1)100B53P3TUBE
100	63	0.39	BA/00B	16.5	6.05	11.0	15	39	F173BA394(1)100T	MDS15394(1)100B53P3TUBE
100	63	0.47	BA/00B	16.5	6.05	11.0	15	30	F173BA474(1)100T	MDS15474(1)100B53P3TUBE
100	63	0.56	BA/00B	16.5	6.05	11.0	15	26	F173BA564(1)100T	MDS15564(1)100B53P3TUBE
100	63	0.68	BA/00B	16.5	6.05	11.0	15	21	F173BA684(1)100T	MDS15684(1)100B53P3TUBE
100	63	0.82	BA/00B	16.5	6.05	11.0	15	18	F173BA824(1)100T	MDS15824(1)100B53P3TUBE
100	63	1.0	BA/00B	16.5	6.05	11.0	15	15	F173BA105(1)100T	MDS15105(1)100B53P3TUBE
100	63	1.2	BA/00B	16.5	6.05	11.0	15	15	F173BA125(1)100T	MDS15125(1)100B53P3TUBE
100	63	1.5	BA/00B	16.5	6.05	11.0	15	13	F173BA155(1)100T	MDS15155(1)100B53P3TUBE
100	63	1.8	BA/00B	16.5	6.05	11.0	15	13	F173BA185(1)100T	MDS15185(1)100B53P3TUBE
100	63	2.2	BA/00B	16.5	6.05	11.0	15	11	F173BA225(1)100T	MDS15225(1)100B53P3TUBE
100	63	2.7	BA/00B	16.5	6.05	11.0	15	11	F173BA275(1)100T	MDS15275(1)100B53P3TUBE
100	63	3.3	BA/00B	16.5	6.05	11.0	15	8	F173BA335(1)100T	MDS15335(1)100B53P3TUBE
100	35	3.9	BA/00B	16.5	6.05	11.0	15	8	F173BA395(1)100T	MDS15395(1)100B53P3TUBE
100	35	4.7	BA/00B	16.5	6.05	11.0	15	6	F173BA475(1)100T	MDS15475(1)100B53P3TUBE
100	35	5.6	BA/00B	16.5	6.05	12.2	15	5	F17(2)BA565(1)100T	MDS15565(1)100B55P(2)TUBE
250	160	0.033	AA/50A	12.2	6.05	11.0	10	390	F173AA333(1)250T	MDS10333(1)250A52P3TUBE
250	160	0.039	AA/50A	12.2	6.05	11.0	10	330	F173AA393(1)250T	MDS10393(1)250A52P3TUBE

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) = Number of leads per side, 3 or 4.

(3) = Number of leads per side, 3, 4 or 5.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz (m Ω)	New KEMET Part Number	Legacy Part Number
				B	H	L				
250	160	0.047	AA/50A	12.2	6.05	11.0	10	270	F173AA473(1)250T	MDS10473(1)250A52P3TUBE
250	160	0.056	AA/50A	12.2	6.05	11.0	10	230	F173AA563(1)250T	MDS10563(1)250A52P3TUBE
250	160	0.068	AA/50A	12.2	6.05	11.0	10	190	F173AA683(1)250T	MDS10683(1)250A52P3TUBE
250	160	0.082	AA/50A	12.2	6.05	11.0	10	160	F173AA823(1)250T	MDS10823(1)250A52P3TUBE
250	160	0.10	AA/50A	12.2	6.05	11.0	10	130	F173AA104(1)250T	MDS10104(1)250A52P3TUBE
250	160	0.12	AA/50A	12.2	6.05	11.0	10	110	F173AA124(1)250T	MDS10124(1)250A52P3TUBE
250	160	0.15	AA/50A	12.2	6.05	11.0	10	85	F173AA154(1)250T	MDS10154(1)250A52P3TUBE
250	160	0.18	AA/50A	12.2	6.05	11.0	10	70	F173AA184(1)250T	MDS10184(1)250A52P3TUBE
250	160	0.22	AA/50A	12.2	6.05	11.0	10	58	F173AA224(1)250T	MDS10224(1)250A52P3TUBE
250	160	0.27	AA/50A	12.2	6.05	11.0	10	47	F173AA274(1)250T	MDS10274(1)250A52P3TUBE
250	160	0.33	AA/50A	12.2	6.05	11.0	10	39	F173AA334(1)250T	MDS10334(1)250A52P3TUBE
250	160	0.39	AA/50A	12.2	6.05	11.0	10	33	F173AA394(1)250T	MDS10394(1)250A52P3TUBE
250	160	0.47	AA/50A	12.2	6.05	11.0	10	30	F173AA474(1)250T	MDS10474(1)250A52P3TUBE
250	160	0.56	AA/50A	12.2	6.05	13.5	10	26	F17(2)AA564(1)250T	MDS10564(1)250A54P(2)TUBE
250	160	0.68	AA/50A	12.2	6.05	16.5	10	21	F17(3)AA684(1)250T	MDS10684(1)250A55P(3)TUBE
250	160	0.033	BA/50B	16.5	6.05	11.0	15	390	F173BA333(1)250T	MDS15333(1)250B53P3TUBE
250	160	0.039	BA/50B	16.5	6.05	11.0	15	330	F173BA393(1)250T	MDS15393(1)250B53P3TUBE
250	160	0.047	BA/50B	16.5	6.05	11.0	15	270	F173BA473(1)250T	MDS15473(1)250B53P3TUBE
250	160	0.056	BA/50B	16.5	6.05	11.0	15	230	F173BA563(1)250T	MDS15563(1)250B53P3TUBE
250	160	0.068	BA/50B	16.5	6.05	11.0	15	190	F173BA683(1)250T	MDS15683(1)250B53P3TUBE
250	160	0.082	BA/50B	16.5	6.05	11.0	15	160	F173BA823(1)250T	MDS15823(1)250B53P3TUBE
250	160	0.10	BA/50B	16.5	6.05	11.0	15	130	F173BA104(1)250T	MDS15104(1)250B53P3TUBE
250	160	0.12	BA/50B	16.5	6.05	11.0	15	110	F173BA124(1)250T	MDS15124(1)250B53P3TUBE
250	160	0.15	BA/50B	16.5	6.05	11.0	15	85	F173BA154(1)250T	MDS15154(1)250B53P3TUBE
250	160	0.18	BA/50B	16.5	6.05	11.0	15	70	F173BA184(1)250T	MDS15184(1)250B53P3TUBE
250	160	0.22	BA/50B	16.5	6.05	11.0	15	58	F173BA224(1)250T	MDS15224(1)250B53P3TUBE
250	160	0.27	BA/50B	16.5	6.05	11.0	15	47	F173BA274(1)250T	MDS15274(1)250B53P3TUBE
250	160	0.33	BA/50B	16.5	6.05	11.0	15	39	F173BA334(1)250T	MDS15334(1)250B53P3TUBE
250	160	0.39	BA/50B	16.5	6.05	11.0	15	39	F173BA394(1)250T	MDS15394(1)250B53P3TUBE
250	160	0.47	BA/50B	16.5	6.05	11.0	15	30	F173BA474(1)250T	MDS15474(1)250B53P3TUBE
250	160	0.56	BA/50B	16.5	6.05	11.0	15	26	F173BA564(1)250T	MDS15564(1)250B53P3TUBE
250	160	0.68	BA/50B	16.5	6.05	11.0	15	21	F173BA684(1)250T	MDS15684(1)250B53P3TUBE
400	200	0.033	AA/00A	12.2	6.05	11.0	10	390	F173AA333(1)400T	MDS10333(1)400A52P3TUBE
400	200	0.039	AA/00A	12.2	6.05	11.0	10	330	F173AA393(1)400T	MDS10393(1)400A52P3TUBE
400	200	0.047	AA/00A	12.2	6.05	11.0	10	270	F173AA473(1)400T	MDS10473(1)400A52P3TUBE
400	200	0.056	AA/00A	12.2	6.05	11.0	10	230	F173AA563(1)400T	MDS10563(1)400A52P3TUBE
400	200	0.068	AA/00A	12.2	6.05	11.0	10	190	F173AA683(1)400T	MDS10683(1)400A52P3TUBE
400	200	0.082	AA/00A	12.2	6.05	11.0	10	160	F173AA823(1)400T	MDS10823(1)400A52P3TUBE
400	200	0.10	AA/00A	12.2	6.05	11.0	10	130	F173AA104(1)400T	MDS10104(1)400A52P3TUBE
400	200	0.12	AA/00A	12.2	6.05	11.0	10	110	F173AA124(1)400T	MDS10124(1)400A52P3TUBE
400	200	0.15	AA/00A	12.2	6.05	11.0	10	85	F173AA154(1)400T	MDS10154(1)400A52P3TUBE
400	200	0.18	AA/00A	12.2	6.05	11.0	10	70	F173AA184(1)400T	MDS10184(1)400A52P3TUBE
400	200	0.33	BA/00B	16.5	6.05	11.0	15	390	F173BA333(1)400T	MDS15333(1)400B53P3TUBE
400	200	0.39	BA/00B	16.5	6.05	11.0	15	330	F173BA393(1)400T	MDS15393(1)400B53P3TUBE
400	200	0.47	BA/00B	16.5	6.05	11.0	15	270	F173BA473(1)400T	MDS15473(1)400B53P3TUBE
400	200	0.56	BA/00B	16.5	6.05	11.0	15	230	F173BA563(1)400T	MDS15563(1)400B53P3TUBE
400	200	0.68	BA/00B	16.5	6.05	11.0	15	190	F173BA683(1)400T	MDS15683(1)400B53P3TUBE
400	200	0.82	BA/00B	16.5	6.05	11.0	15	160	F173BA823(1)400T	MDS15823(1)400B53P3TUBE
400	200	0.10	BA/00B	16.5	6.05	11.0	15	130	F173BA104(1)400T	MDS10104(1)400B53P3TUBE
400	200	0.12	BA/00B	16.5	6.05	11.0	15	110	F173BA124(1)400T	MDS10124(1)400B53P3TUBE
400	200	0.15	BA/00B	16.5	6.05	11.0	15	85	F173BA154(1)400T	MDS10154(1)400B53P3TUBE
400	200	0.18	BA/00B	16.5	6.05	11.0	15	70	F173BA184(1)400T	MDS10184(1)400B53P3TUBE
400	200	0.22	BA/00B	16.5	6.05	11.0	15	58	F173BA224(1)400T	MDS10224(1)400B53P3TUBE
400	200	0.27	BA/00B	16.5	6.05	11.0	15	47	F173BA274(1)400T	MDS10274(1)400B53P3TUBE
400	200	0.33	BA/00B	16.5	6.05	12.2	15	39	F17(2)BA334(1)400T	MDS10334(1)400B55P(2)TUBE
630	220	0.033	AA/30A	12.2	6.05	11.0	10	390	F173AA333(1)630T	MDS10333(1)630A52P3TUBE
630	220	0.039	AA/30A	12.2	6.05	11.0	10	330	F173AA393(1)630T	MDS10393(1)630A52P3TUBE
630	220	0.047	AA/30A	12.2	6.05	11.0	10	270	F173AA473(1)630T	MDS10473(1)630A52P3TUBE
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	ESR 500 kHz (m Ω)	New KEMET Part Number	Legacy Part Number

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) = Number of leads per side, 3 or 4.

(3) = Number of leads per side, 3, 4 or 5.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Lead Spacing (p)	ESR 500 kHz ($\text{m}\Omega$)	New KEMET Part Number	Legacy Part Number
				B	H	L				
630	220	0.056	AA/30A	12.2	6.05	11.0	10	230	F173AA563(1)630T	MDS10563(1)630A52P3TUBE
630	220	0.068	AA/30A	12.2	6.05	13.5	10	190	F17(2)AA683(1)630T	MDS10683(1)630A54P(2)TUBE
630	220	0.033	BA/30B	16.5	6.05	11.0	15	390	F173BA333(1)630T	MDS15333(1)630B53P3TUBE
630	220	0.039	BA/30B	16.5	6.05	11.0	15	330	F173BA393(1)630T	MDS15393(1)630B53P3TUBE
630	220	0.047	BA/30B	16.5	6.05	11.0	15	270	F173BA473(1)630T	MDS15473(1)630B53P3TUBE
630	220	0.056	BA/30B	16.5	6.05	11.0	15	230	F173BA563(1)630T	MDS15563(1)630B53P3TUBE
630	220	0.068	BA/30B	16.5	6.05	11.0	15	190	F173BA683(1)630T	MDS15683(1)630B53P3TUBE
630	220	0.082	BA/30B	16.5	6.05	11.0	15	160	F173BA823(1)630T	MDS15823(1)630B53P3TUBE
630	220	0.10	BA/30B	16.5	6.05	11.0	15	130	F173BA104(1)630T	MDS15104(1)630B53P3TUBE
VDC	VAC	Capacitance Value (μF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	ESR 500 kHz ($\text{m}\Omega$)	New KEMET Part Number	Legacy Part Number

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

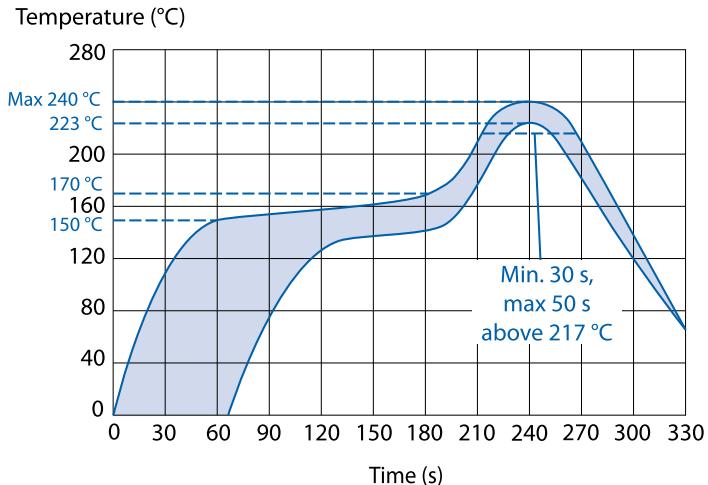
(2) = Number of leads per side, 3 or 4.

(3) = Number of leads per side, 3, 4 or 5.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 240°C.

A lead-free soldering process for this series is in development. Please contact KEMET for details.



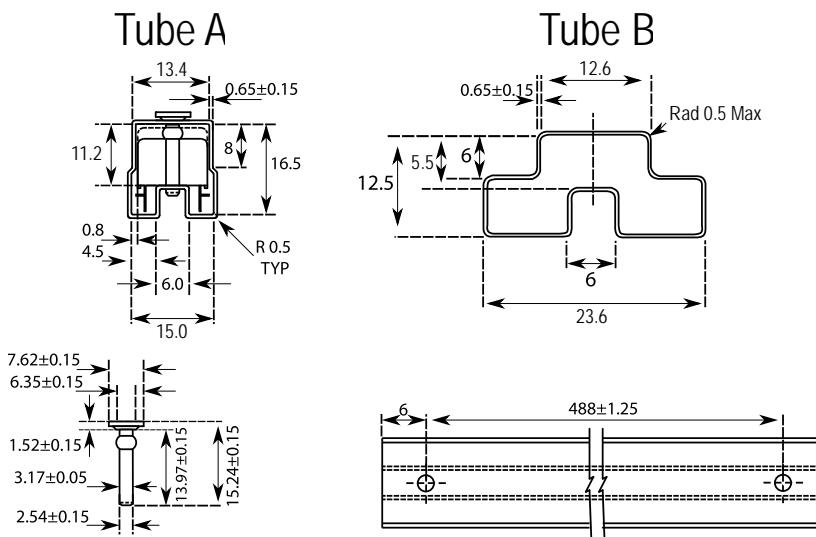
Marking

- KEMET
- Capacitance
- Capacitance tolerance code
- Rated voltage
- Capacitor family code MDS

Packaging Quantities

Size Code	Lead Spacing	Base (mm)	Height (mm)	Length mm	Bulk	Reel
A52	10.0	12.2	6.05	11.0	43	
A53		12.7	9.0	14.0	34	200
A54		12.2	6.05	13.5	35	
A55		12.2	6.05	16.5	28	
A57		12.7	9.0	23.0	21	
A58		12.7	11.0	23.0	21	
B53	15.0	16.5	6.05	11.0	43	
B55		16.5	6.05	12.2	39	

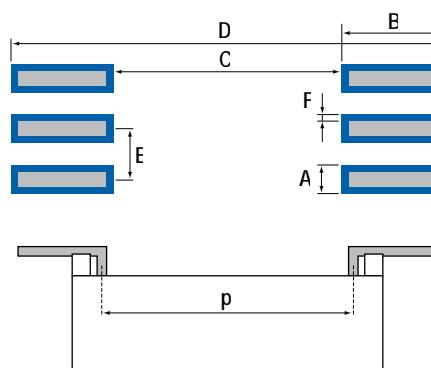
Tube Packaging



Size Code	Dimensions in mm	Tube
A52	10.0 – 12.2 x 6.05 x 11.0	Tube B
A53	10.0 – 12.7 x 9.0 x 14.0	Tube A
A54	10.0 – 12.2 x 6.05 x 13.5	Tube B
A55	10.0 – 12.2 x 6.05 x 16.5	Tube B
A57	10.0 – 12.7 x 9.0 x 23.0	Tube A
A58	10.0 – 12.7 x 11.0 x 23.0	Tube A

Landing

Size	Dimensions in mm						
	p	A	B	C	D	E	F
A52	10	1	2	9.15	13.15	2.54	0.25
A53	10	1	2	9.15	13.15	2.54	0.25
A54	10	1	2	9.15	13.15	2.54	0.25
A55	10	1	2	9.15	13.15	2.54	0.25
A57	10	1	2	9.15	13.15	2.54	0.25
A58	10	1	2	9.15	13.15	2.54	0.25
B53	15	1	2	14.15	18.15	2.54	0.25
B55	15	1	2	14.15	18.15	2.54	0.25



JSN Series Unencapsulated Stacked Chip with Flat Terminations, 100 – 250 VDC, for DC Link

Overview

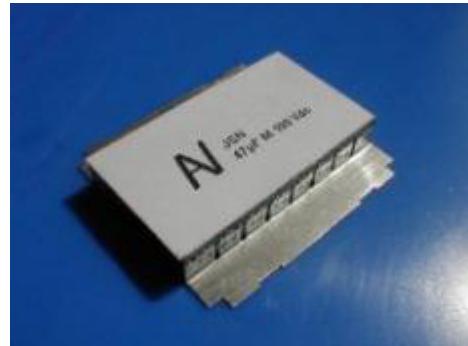
Jumbo stacked naked metallized polyester capacitor with flat terminations.

Applications

JSN Series capacitors are designed especially for automotive power electronics applications that require high reliability, long life and severe working conditions such as high operating temperature and significant mechanical and vibration requirements.

Benefits

- Rated voltage: 100 – 250 VDC
- Rated voltage: 63 – 160 VAC
- Capacitance range: 10 – 68 μ F
- Capacitance tolerance: $\pm 10\%$, $\pm 20\%$
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



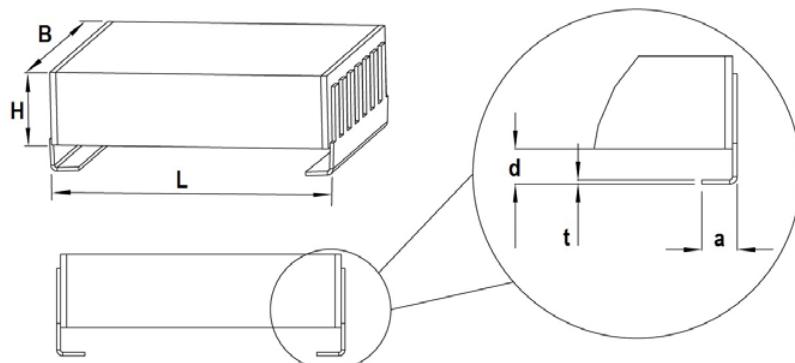
Part Number System

JSN	E	K	5100	M	B	6	M	0
Series	Rated Voltage (VDC)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Dielectric	Terminal Width (mm)	Packaging Code	Internal Use
JSN = Jumbo Stacked Naked	E = 100 G = 160 I = 250	See Dimension Table	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	K = $\pm 10\%$ M = $\pm 20\%$	B = Metallized PET	6 = 20 8 = 40	See Ordering Options Table	0 (Standard)

Ordering Options Table

Packaging Type	Packaging Code
Standard Packaging Options	
Bulk (Bag)	M
Bulk (Tray)	L

Dimensions – Millimeters

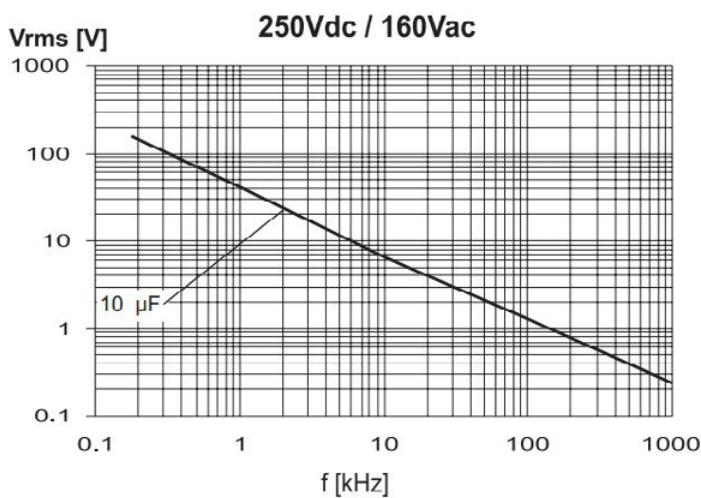
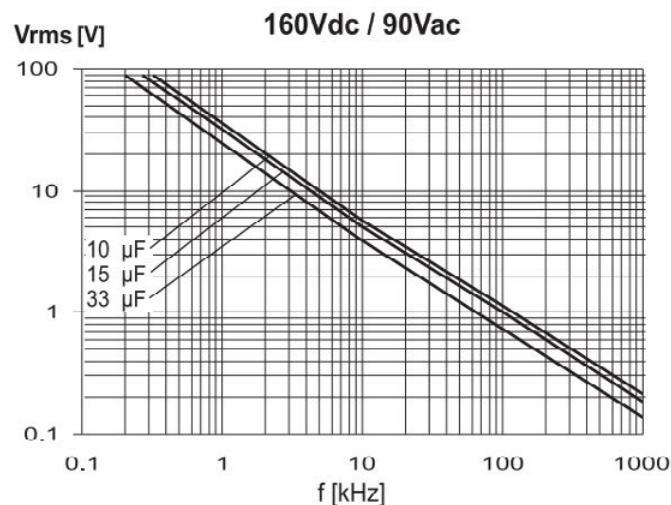
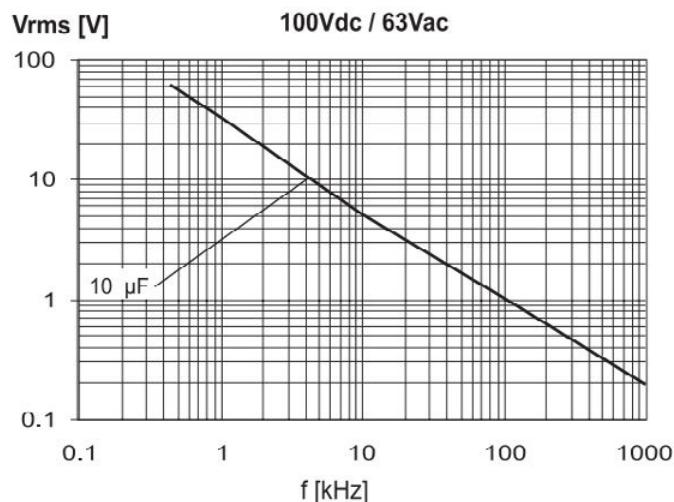


Size Code	B		H	L		d		a		t	
	Nominal	Tolerance		Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
K	21.5	Maximum	See Part Number Table	17.0	Maximum	2	+/-1.0	2	+/-1.0	0.2	+/-0.1
J	30.0	Maximum		17.0	Maximum	2	+/-1.0	2	+/-1.0	0.2	+/-0.1
L	42.9	Maximum		17.0	Maximum	2	+/-1.0	2	+/-1.0	0.2	+/-0.1

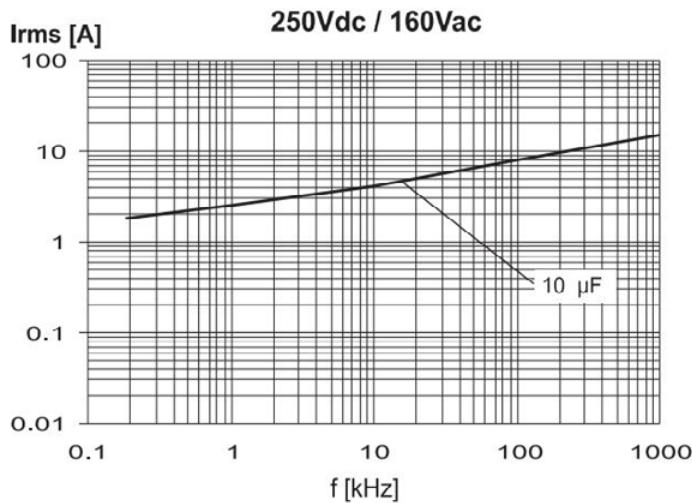
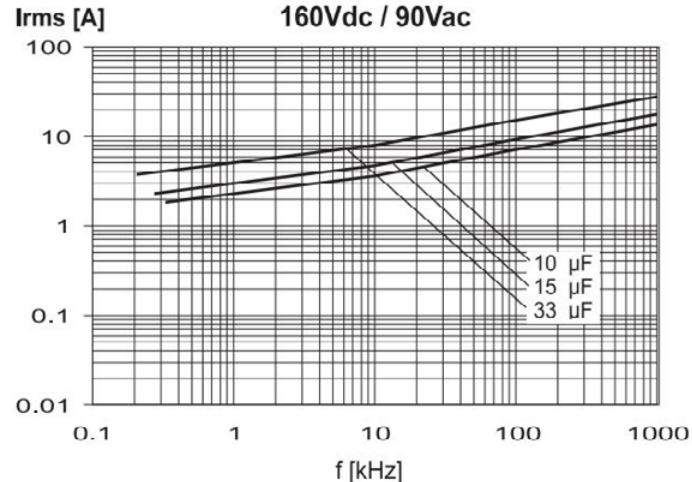
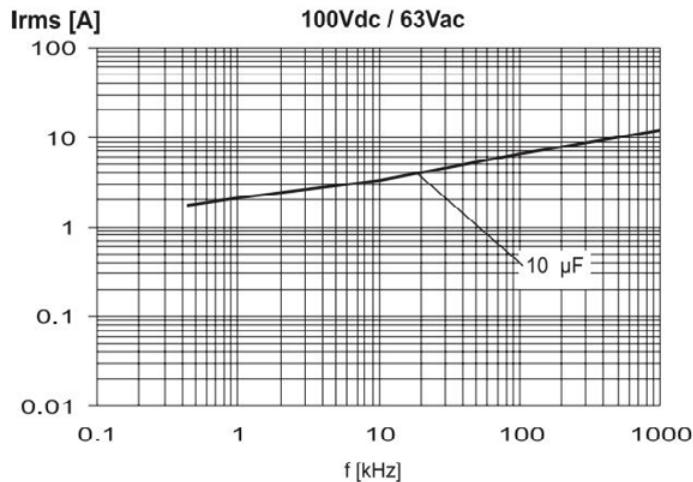
Performance Characteristics

Voltage Range (VDC)	100	160	250		
Voltage Range (VAC)	63	90	160		
Capacitance Range (μ F)	10 – 68	10 – 33	10 – 15		
Capacitance Values	E6 series (IEC 60063)				
Capacitance Tolerance	$\pm 10\%$, $\pm 20\%$				
Category Temperature Range	-55°C to +125°C				
Rated Temperature	+105 °C				
Voltage Derating	The rated voltage is decreased with 1.25%/°C from +105°C to +125°C				
Climatic Category	55/125/56 IEC 60068-1				
Test Voltage	1.4 x V_R applied for 2 seconds at +25°C ± 5				
Insulation Resistance	Measured at +25°C ± 5 °C				
	V_R (VDC)	Minimum Values Between Terminals			
	100	$\geq 250 \text{ M}\Omega \cdot \mu\text{F}$			
	160	$\geq 400 \text{ M}\Omega \cdot \mu\text{F}$			
Dissipation Factor	Maximum Values at 25°C ± 5 °C				
	1 kHz	1.0%			
Storage Conditions:	Temperature range: 0°C up to +40°C				
	Humidity: 60% RH maximum				

Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/T $\leq +40^{\circ}\text{C}$)



Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/ $T \leq +40^\circ\text{C}$)



Environmental Test Data

Damp Heat, Steady State	
Test Conditions	
Temperature	+40°C ±2°C
Relative Humidity (RH)	93% ±2%
Test Duration	56 days
Performance	
Capacitance Change Δ C/C	≤ 7%
DF Change (Δtgδ)	≤ 50 x 10⁻⁴ at 1 kHz
Insulation Resistance	≥ 50% of limit value
Endurance	
Test Conditions	
Temperature	125°C ±2°C
Test Duration	2,000 hours
Voltage Applied	1.25 x V _c
Performance	
Capacitance Change Δ C/C	≤ 5%
DF Change (Δtgδ)	≤ 50 x 10⁻⁴ at 1 kHz
Insulation Resistance	≥ 50% of limit value
Rapid Change of Temperature	
Test Conditions	
Temperature	1 hour at -55°C, 1 hour at +125°C
Number of Cycles	1,000
Performance	
Capacitance Change Δ C/C	≤ 3%
DF Change (Δtgδ)	≤ 50 x 10⁻⁴ at 1 kHz
Insulation Resistance	≥ limit value
No Mechanical Damage	

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.



RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Capacitance Value (μF)	Dimensions in mm			dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
			B	H	L			
100	63	10	21.5	7	17	27	SNEK5100(1)B6(2)0	JSNEK5100(1)B6(2)0
100	63	15	30	8	17	27	SNEJ5150(1)B6(2)0	JSNEJ5150(1)B6(2)0
100	63	22	21.5	14	17	27	SNEK5220(1)B6(2)0	JSNEK5220(1)B6(2)0
100	63	33	30	15	17	27	SNEJ5330(1)B6(2)0	JSNEJ5330(1)B6(2)0
100	63	47	42.9	15	17	27	SNEL5470(1)B8(2)0	JSNEL5470(1)B8(2)0
100	63	68	42.9	21	17	27	SNEL5680(1)B8(2)0	JSNEL5680(1)B8(2)0
160	90	10	21.5	15	17	35	SNGK5100(1)B6(2)0	JSNGK5100(1)B6(2)0
160	90	15	30	15	17	35	SNGJ5150(1)B6(2)0	JSNGJ5150(1)B6(2)0
160	90	22	30	23	17	35	SNGJ5220(1)B6(2)0	JSNGJ5220(1)B6(2)0
160	90	33	42.9	23	17	35	SNGL5330(1)B8(2)0	JSNGL5330(1)B8(2)0
250	160	10	30	20	17	40	SNIJ5100(1)B6(2)0	JSNIJ5100(1)B6(2)0
250	160	15	42.9	20	17	40	SNIL5150(1)B8(2)0	JSNIL5150(1)B8(2)0
VDC	VAC	Capacitance Value (μF)	B (mm)	H (mm)	L (mm)	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number

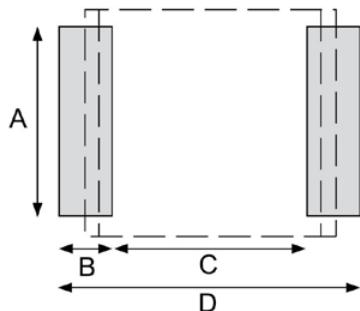
(1) $K = \pm 10\%$, $M = \pm 20\%$.

(2) Insert packaging code. See Ordering Options Table for available options.

Marking

- KEMET
- Capacitance
- Rated voltage

Landing



Size	Dimensions in mm			
	A	B	C	D
K	21.9	5	10.2	20.4
J	30.4	5	10.2	20.4
L	43.3	5	10.2	20.4

General Purpose, High Stability and AC Line EMI Suppression
**LDE Series Unencapsulated Stacked Chip,
Size 1206 – 6054, 50 – 1,000 VDC**

The Capacitance Company
KEMET
CHARGED.[®]

Overview

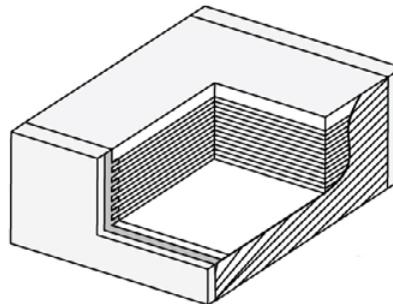
Polyethylene naphthalate (PEN) film capacitor for surface mounting.

Applications

Typical applications include bypassing and signal coupling. LDE is a general purpose series designed for the highest reliability and high temperature service.

Benefits

- Rated voltage: 50 – 1,000 VDC
- Rated voltage: 40 – 250 VAC
- Capacitance range: 0.001 – 4.7 μ F
- EIA size: 1206 – 6054
- Capacitance tolerance: $\pm 10\%$, $\pm 20\%$, $\pm 5\%$ on request
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



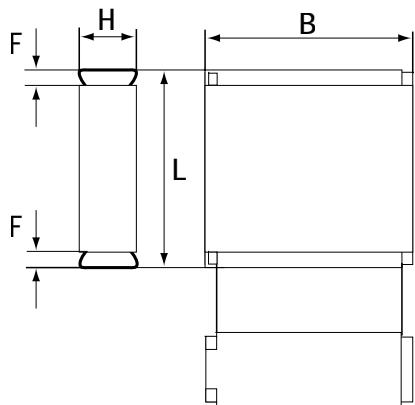
Part Number System

LDE	C	C	2560	M	A5	N	00
Series	Rated Voltage (VDC)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Version	Packaging Code	Internal Use
Metallized PEN	C = 50 D = 63 E = 100 I = 250 M = 400 P = 630 Q = 1000	See Dimension Table	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	K = $\pm 10\%$ M = $\pm 20\%$ J = $\pm 5\%$ on request	A5 = Standard A0 = Miniature	See Ordering Options Table	00 (Standard)

Ordering Options Table

Packaging Type	Packaging Code
Standard Packaging Options	
Tape & Reel (Standard Reel)	N

Dimensions – Millimeters



Size Code	Chip Size (EIA)	B		H	L	
		Nominal	Tolerance		Nominal	Tolerance
A	1206	1.7	+/-0.2	See Part Number Table	3.3	+0.3/-0.1
B	1210	2.5	+/-0.3		3.3	+0.3/-0.1
C	1812	3.3	+/-0.3		4.7	+0.3/-0.2
D	2220	5.0	+/-0.4		6.0	+/-0.3
E	2824	6.1	+/-0.4		7.3	+/-0.4
F	4030	7.9	+/-0.5		10.5	+/-0.4
G	5040	10.4	+/-0.5		13.0	+/-0.4
H	6054	13.7	+/-0.5		15.5	+/-0.4

Performance Characteristics

Rated Voltage (VDC)	50	63	100	250	400	630	1000				
Rated Voltage (VAC)	40	40	63	120	160	200	250				
Capacitance Range (μ F)	0.056 – 4.7	0.056 – 4.7	0.056 – 4.7	0.056 – 1.5	0.015 – 0.47	0.001 – 0.27	0.001 – 0.1				
Chip Size (EIA)	1206 – 6054										
Capacitance Values	E12 series										
Capacitance Tolerance	$\pm 10\%$, $\pm 20\%$, $\pm 5\%$ on request										
Category Temperature Range	-55°C to +125°C										
Rated Temperature	+105°C										
Voltage Derating	The rated voltage is decreased with 1.25%/°C from +105°C to +125°C										
Climatic Category	55/125/56										
Insulation Resistance	Measured at +25°C $\pm 5^\circ\text{C}$										
	Minimum Value Between Terminals										
	$C \leq 0.33 \mu\text{F}$			1,000 M Ω							
Dissipation Factor	C > 0.33 μF										
	Maximum Values at 25°C $\pm 5^\circ\text{C}$										
	1 kHz			0.8%							
Surge Voltage Test	1.4 $\times V_R$ (2 seconds; T = 25 $\pm 5^\circ\text{C}$) for $V_R \leq 630$ VDC										
	1.5 $\times V_R$ (2 seconds; T = 25 $\pm 5^\circ\text{C}$) for $V_R = 1,000$ VDC										

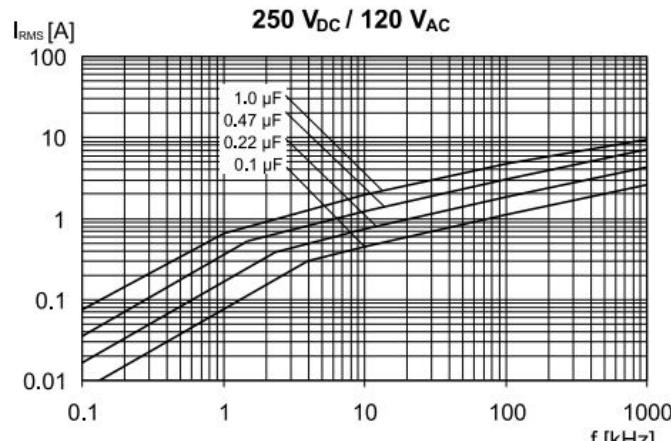
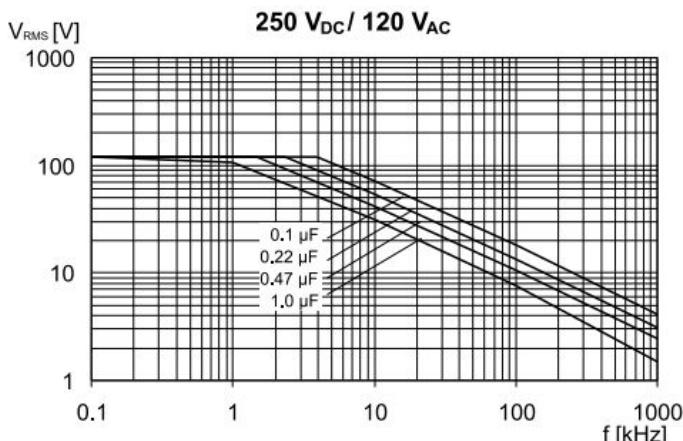
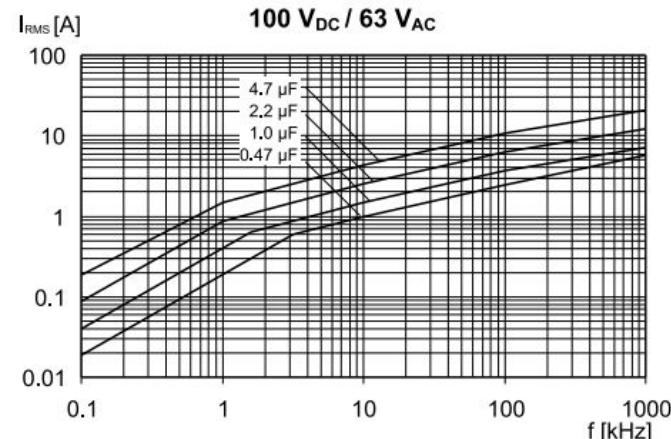
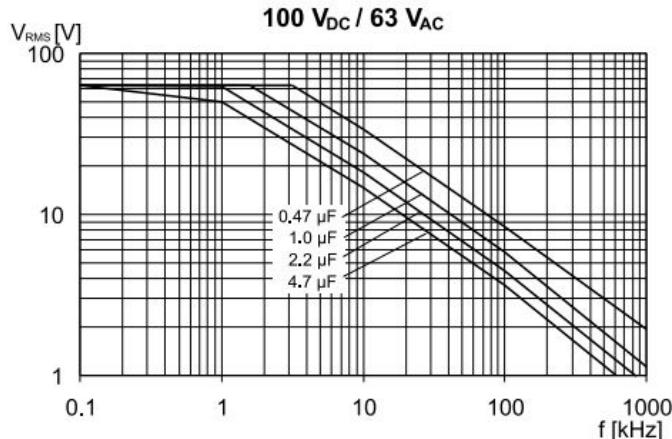
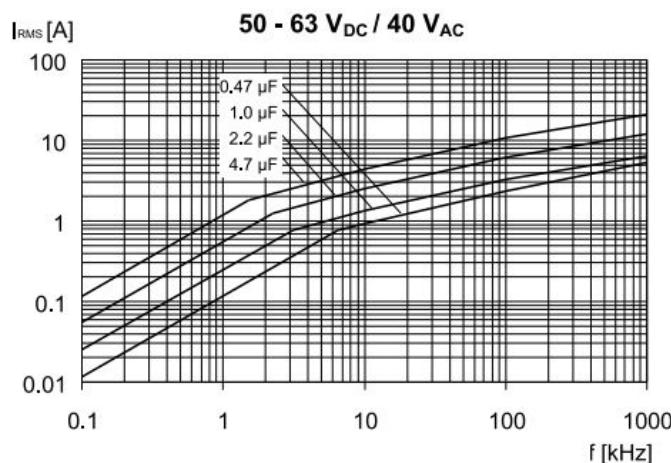
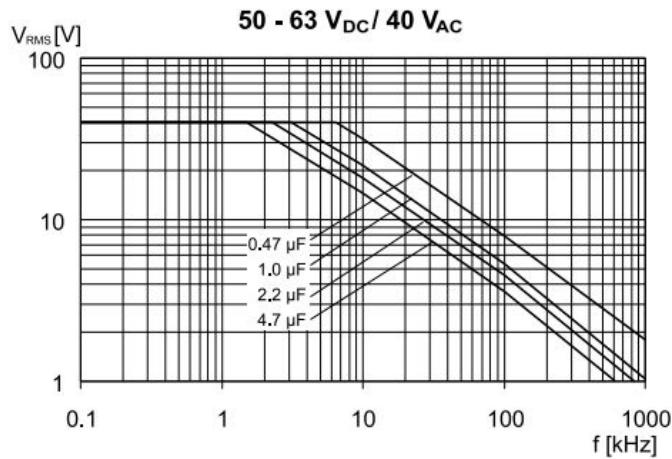
Maximum RMS Voltage V_{rms} (V) vs. Frequency

Value	Rated Voltage	Case Size	1 kHz	10 kHz	100 kHz	500 kHz	1 MHz
1.0 μF	250 V	A57	150.0	36.0	9.2	2.9	1.3
2.2 μF	100 V	A52	50.0	25.0	5.0	1.2	0.6
3.9 μF	100 V	A52	50.0	18.0	4.0	1.0	0.3
4.7 μF	100 V	A54	50.0	16.0	3.5	0.7	0.2
6.8 μF	100 V	A57	50.0	15.5	2.2	0.5	0.2

Maximum RMS Current I_{rms} (A) vs. Frequency

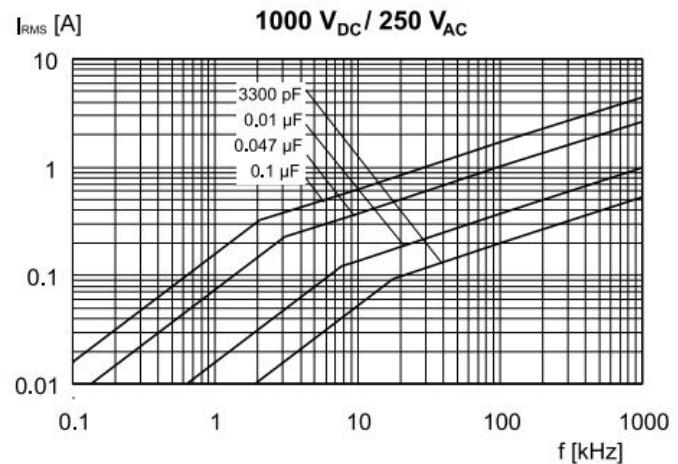
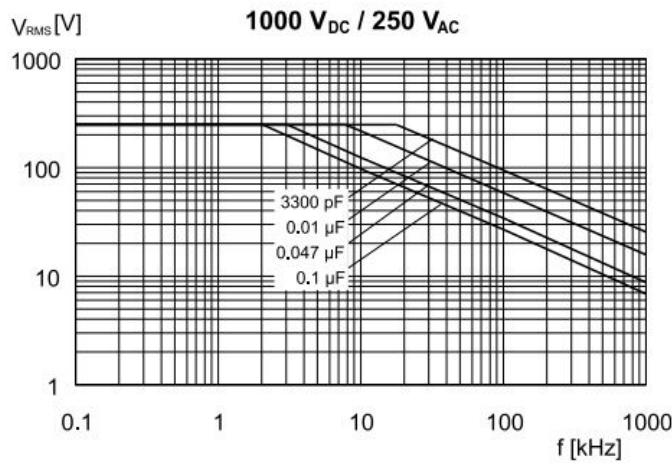
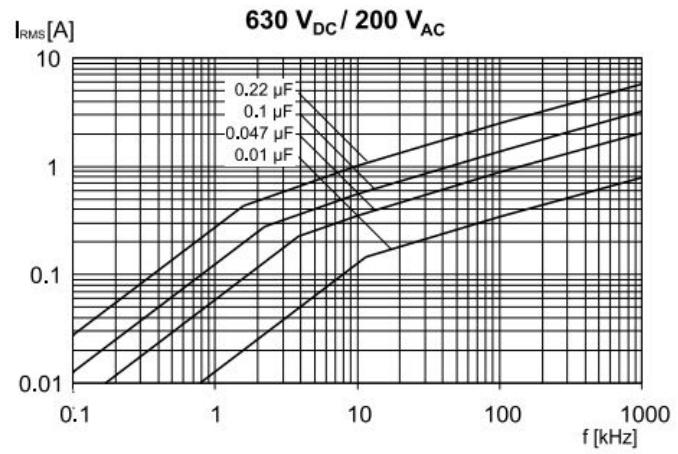
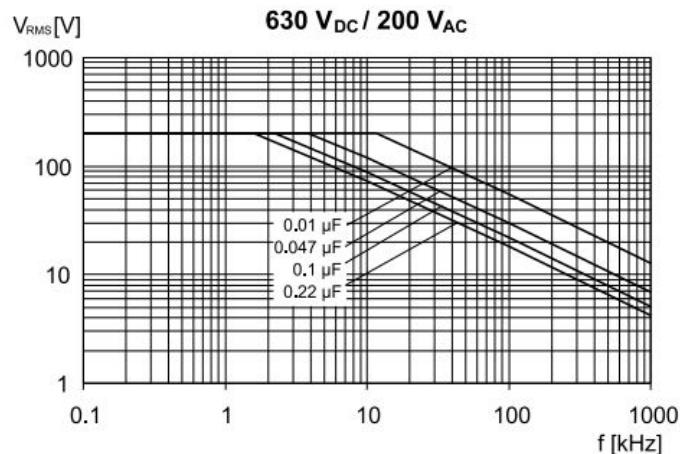
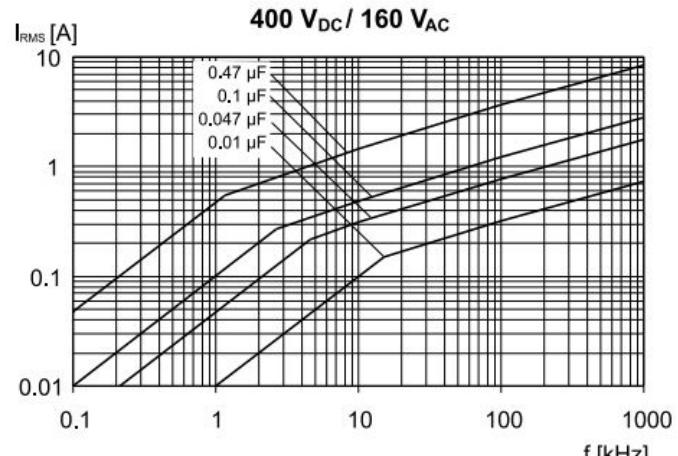
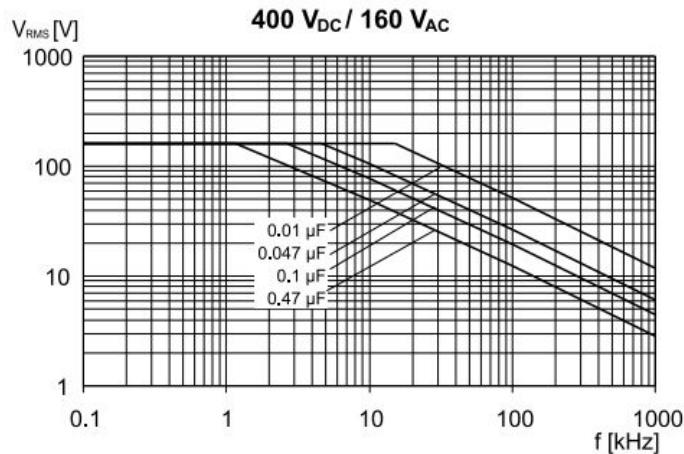
Value	Rated Voltage	Case Size	1 kHz	10 kHz	100 kHz	500 kHz	1 MHz
1.0 μF	250 V	A57	1.0	2.2	5.5	9.0	10.0
2.2 μF	100 V	A52	1.5	2.3	6.0	7.5	10.0
3.9 μF	100 V	A52	2.0	4.0	10.0	11.0	11.5
4.7 μF	100 V	A54	2.0	4.5	10.0	12.5	12.5
6.8 μF	100 V	A57	3.0	6.0	11.0	13.0	13.5

Maximum (V_{rms}) and (I_{rms}) vs. Frequency (Sinusoidal Waveform/ $T^* \leq +85^\circ\text{C}$)



*Maximum ambient temperature surrounding the capacitor or hottest contact point, e.g., tracks, whichever is higher, in the worst operating conditions in °C.
Measurements performed in free air condition.

Maximum (V_{rms}) and (I_{rms}) vs. Frequency (Sinusoidal Waveform/ $T^* \leq +85^\circ\text{C}$)



*Maximum ambient temperature surrounding the capacitor or hottest contact point, e.g., tracks, whichever is higher, in the worst operating conditions in $^\circ\text{C}$. Measurements performed in free air condition.

Environmental Test Data

Damp Heat, Steady State	
Test Conditions	
Temperature	+40°C ±2°C
Relative Humidity (RH)	93% ±2%
Test Duration	56 days
Performance	
Capacitance Change Δ C/C	≤ 7%
DF Change (Δtgδ)	≤ 50 x 10⁻⁴ at 1 kHz
Insulation Resistance	≥ 50% of limit value
Endurance	
Test Conditions	
Temperature	125°C ±2°C
Test Duration	2,000 hours
Voltage Applied	1.25 x V _c
Performance	
Capacitance Change Δ C/C	≤ 5%
DF Change (Δtgδ)	≤ 50 x 10⁻⁴ at 1 kHz
Insulation Resistance	≥ 50% of limit value
Rapid Change of Temperature	
Test Conditions	
Temperature	1 hour at -55°C, 1 hour at +125°C
Number of Cycles	1,000
Performance	
Capacitance Change Δ C/C	≤ 3%
DF Change (Δtgδ)	≤ 50 x 10⁻⁴ at 1 kHz
Insulation Resistance	≥ limit value
No Mechanical Damage	

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.



RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (μ F)	Size Code	Chip Size	Dimensions in mm			dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
					B	H	L			
50	40	0.001	A	1206	1.7	1.1	3.3	100	DECA1100(1)A0N00	LDECA1100(1)A0N00
50	40	0.0012	A	1206	1.7	1.1	3.3	100	DECA1120(1)A0N00	LDECA1120(1)A0N00
50	40	0.0015	C	1812	3.3	1.7	4.7	100	DECC1150(1)A5N00	LDECC1150(1)A5N00
50	40	0.0015	A	1206	1.7	1.1	3.3	100	DECA1150(1)A0N00	LDECA1150(1)A0N00
50	40	0.0018	C	1812	3.3	1.7	4.7	100	DECC1180(1)A5N00	LDECC1180(1)A5N00
50	40	0.0018	A	1206	1.7	1.1	3.3	100	DECA1180(1)A0N00	LDECA1180(1)A0N00
50	40	0.0022	C	1812	3.3	1.7	4.7	100	DECC1220(1)A5N00	LDECC1220(1)A5N00
50	40	0.0022	A	1206	1.7	1.1	3.3	100	DECA1220(1)A0N00	LDECA1220(1)A0N00
50	40	0.0027	C	1812	3.3	1.8	4.7	100	DECC1270(1)A5N00	LDECC1270(1)A5N00
50	40	0.0027	A	1206	1.7	1.1	3.3	100	DECA1270(1)A0N00	LDECA1270(1)A0N00
50	40	0.0033	C	1812	3.3	1.7	4.7	100	DECC1330(1)A5N00	LDECC1330(1)A5N00
50	40	0.0033	A	1206	1.7	1.2	3.3	100	DECA1330(1)A0N00	LDECA1330(1)A0N00
50	40	0.0039	C	1812	3.3	1.7	4.7	100	DECC1390(1)A5N00	LDECC1390(1)A5N00
50	40	0.0039	A	1206	1.7	1.1	3.3	100	DECA1390(1)A0N00	LDECA1390(1)A0N00
50	40	0.0047	C	1812	3.3	1.8	4.7	100	DECC1470(1)A5N00	LDECC1470(1)A5N00
50	40	0.0047	A	1206	1.7	1.1	3.3	100	DECA1470(1)A0N00	LDECA1470(1)A0N00
50	40	0.0056	C	1812	3.3	1.7	4.7	100	DECC1560(1)A5N00	LDECC1560(1)A5N00
50	40	0.0056	A	1206	1.7	1.1	3.3	100	DECA1560(1)A0N00	LDECA1560(1)A0N00
50	40	0.0068	C	1812	3.3	1.7	4.7	100	DECC1680(1)A5N00	LDECC1680(1)A5N00
50	40	0.0068	A	1206	1.7	1.1	3.3	100	DECA1680(1)A0N00	LDECA1680(1)A0N00
50	40	0.0082	C	1812	3.3	1.8	4.7	100	DECC1820(1)A5N00	LDECC1820(1)A5N00
50	40	0.0082	A	1206	1.7	1.1	3.3	100	DECA1820(1)A0N00	LDECA1820(1)A0N00
50	40	0.01	C	1812	3.3	1.7	4.7	100	DECC2100(1)A5N00	LDECC2100(1)A5N00
50	40	0.01	A	1206	1.7	1.1	3.3	100	DECA2100(1)A0N00	LDECA2100(1)A0N00
50	40	0.012	C	1812	3.3	1.7	4.7	100	DECC2120(1)A5N00	LDECC2120(1)A5N00
50	40	0.012	A	1206	1.7	1.1	3.3	100	DECA2120(1)A0N00	LDECA2120(1)A0N00
50	40	0.015	C	1812	3.3	1.7	4.7	100	DECC2150(1)A5N00	LDECC2150(1)A5N00
50	40	0.015	A	1206	1.7	1.2	3.3	100	DECA2150(1)A0N00	LDECA2150(1)A0N00
50	40	0.018	C	1812	3.3	1.8	4.7	100	DECC2180(1)A5N00	LDECC2180(1)A5N00
50	40	0.018	A	1206	1.7	1.1	3.3	100	DECA2180(1)A0N00	LDECA2180(1)A0N00
50	40	0.022	C	1812	3.3	1.7	4.7	100	DECC2220(1)A5N00	LDECC2220(1)A5N00
50	40	0.022	A	1206	1.7	1.1	3.3	100	DECA2220(1)A0N00	LDECA2220(1)A0N00
50	40	0.027	C	1812	3.3	1.7	4.7	100	DECC2270(1)A5N00	LDECC2270(1)A5N00
50	40	0.027	A	1206	1.7	1.1	3.3	100	DECA2270(1)A0N00	LDECA2270(1)A0N00
50	40	0.033	C	1812	3.3	1.8	4.7	100	DECC2330(1)A5N00	LDECC2330(1)A5N00
50	40	0.033	B	1210	2.5	2.0	3.3	100	DECB2330(1)A0N00	LDECB2330(1)A0N00
50	40	0.033	A	1206	1.7	1.2	3.3	100	DECA2330(2)A0N00	LDECA2330(2)A0N00
50	40	0.039	C	1812	3.3	1.7	4.7	100	DECC2390(1)A5N00	LDECC2390(1)A5N00
50	40	0.039	B	1210	2.5	2.1	3.3	100	DECB2390(1)A0N00	LDECB2390(1)A0N00
50	40	0.047	C	1812	3.3	1.7	4.7	100	DECC2470(1)A5N00	LDECC2470(1)A5N00
50	40	0.047	B	1210	2.5	2.1	3.3	100	DECB2470(1)A0N00	LDECB2470(1)A0N00
50	40	0.056	C	1812	3.3	1.7	4.7	100	DECC2560(1)A5N00	LDECC2560(1)A5N00
50	40	0.056	B	1210	2.5	1.7	3.3	100	DECB2560(1)A0N00	LDECB2560(1)A0N00
50	40	0.068	C	1812	3.3	1.8	4.7	100	DECC2680(1)A5N00	LDECC2680(1)A5N00
50	40	0.068	B	1210	2.5	2.0	3.3	100	DECB2680(1)A0N00	LDECB2680(1)A0N00
50	40	0.082	C	1812	3.3	2.1	4.7	100	DECC2820(1)A5N00	LDECC2820(1)A5N00
50	40	0.082	B	1210	2.5	2.1	3.3	100	DECB2820(1)A0N00	LDECB2820(1)A0N00
50	40	0.1	C	1812	3.3	2.4	4.7	100	DECC3100(1)A5N00	LDECC3100(1)A5N00
50	40	0.1	B	1210	2.5	2.1	3.3	100	DECB3100(1)A0N00	LDECB3100(1)A0N00
50	40	0.12	C	1812	3.3	1.7	4.7	100	DECC3120(1)A5N00	LDECC3120(1)A5N00
50	40	0.15	C	1812	3.3	1.9	4.7	100	DECC3150(1)A5N00	LDECC3150(1)A5N00
50	40	0.18	C	1812	3.3	2.2	4.7	100	DECC3180(1)A5N00	LDECC3180(1)A5N00
50	40	0.22	C	1812	3.3	2.4	4.7	100	DECC3220(1)A5N00	LDECC3220(1)A5N00
50	40	0.27	D	2220	5.0	1.9	6.0	100	DECD3270(1)A5N00	LDECD3270(1)A5N00
50	40	0.33	D	2220	5.0	1.9	6.0	100	DECD3330(1)A5N00	LDECD3330(1)A5N00
50	40	0.39	D	2220	5.0	2.1	6.0	100	DECD3390(1)A5N00	LDECD3390(1)A5N00
50	40	0.47	D	2220	5.0	2.4	6.0	100	DECD3470(1)A5N00	LDECD3470(1)A5N00
50	40	0.56	D	2220	5.0	2.8	6.0	100	DECD3560(1)A5N00	LDECD3560(1)A5N00
50	40	0.68	D	2220	5.0	3.3	6.0	100	DECD3680(1)A5N00	LDECD3680(1)A5N00
50	40	0.82	E	2824	6.1	2.9	7.3	100	DECE3820(1)A5N00	LDECE3820(1)A5N00

(1) $K = \pm 10\%$, $M = \pm 20\%$, $J = \pm 5\%$ on request.(2) Only K and M tolerances available.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code	Chip Size	Dimensions in mm			dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
					B	H	L			
50	40	0.82	D	2220	5.0	3.7	6.0	100	DECD3820(1)A0N00	LDECD3820(1)A0N00
50	40	1.0	E	2824	6.1	3.1	7.3	100	DECE4100(1)A5N00	LDECE4100(1)A5N00
50	40	1.0	D	2220	5.0	4.4	6.0	100	DEC4100(1)A0N00	LDECD4100(1)A0N00
50	40	1.2	E	2824	6.1	3.6	7.3	100	DECE4120(1)A5N00	LDECE4120(1)A5N00
50	40	1.5	G	5040	10.4	3.1	13.0	100	DECG4150(1)A5N00	LDECG4150(1)A5N00
50	40	1.5	E	2824	6.1	4.3	7.3	100	DECE4150(1)A0N00	LDECE4150(1)A0N00
50	40	1.8	G	5040	10.4	3.4	13.0	100	DECG4180(1)A5N00	LDECG4180(1)A5N00
50	40	1.8	E	2824	6.1	5.1	7.3	100	DECE4180(1)A0N00	LDECE4180(1)A0N00
50	40	2.2	G	5040	10.4	4.1	13.0	100	DECG4220(1)A5N00	LDECG4220(1)A5N00
50	40	2.2	F	4030	7.9	3.3	10.5	100	DEC4220(1)A0N00	LDECF4220(1)A0N00
50	40	2.7	G	5040	10.4	4.9	13.0	100	DECG4270(1)A5N00	LDECG4270(1)A5N00
50	40	2.7	F	4030	7.9	4.0	10.5	100	DEC4270(1)A0N00	LDECF4270(1)A0N00
50	40	3.3	H	6054	13.7	3.9	15.5	100	DECH4330(1)A5N00	LDECH4330(1)A5N00
50	40	3.3	F	4030	7.9	4.7	10.5	100	DEC4330(1)A0N00	LDECF4330(1)A0N00
50	40	3.9	H	6054	13.7	4.5	15.5	100	DECH4390(1)A5N00	LDECH4390(1)A5N00
50	40	3.9	F	4030	7.9	5.5	10.5	100	DEC4390(1)A0N00	LDECF4390(1)A0N00
50	40	4.7	H	6054	13.7	5.3	15.5	100	DECH4470(1)A5N00	LDECH4470(1)A5N00
50	40	4.7	G	5040	10.4	4.1	13.0	100	DECG4470(1)A0N00	LDECG4470(1)A0N00
63	40	0.001	A	1206	1.7	1.1	3.3	100	DEDA1100(1)A0N00	LDEDA1100(1)A0N00
63	40	0.0012	A	1206	1.7	1.1	3.3	100	DEDA1120(1)A0N00	LDEDA1120(1)A0N00
63	40	0.0015	C	1812	3.3	1.7	4.7	100	DEC1150(1)A5N00	LDED1150(1)A5N00
63	40	0.0015	A	1206	1.7	1.1	3.3	100	DEDA1150(1)A0N00	LDEDA1150(1)A0N00
63	40	0.0018	C	1812	3.3	1.7	4.7	100	DEC1180(1)A5N00	LDED1180(1)A5N00
63	40	0.0018	A	1206	1.7	1.1	3.3	100	DEDA1180(1)A0N00	LDEDA1180(1)A0N00
63	40	0.0022	C	1812	3.3	1.7	4.7	100	DEC1220(1)A5N00	LDED1220(1)A5N00
63	40	0.0022	A	1206	1.7	1.1	3.3	100	DEDA1220(1)A0N00	LDEDA1220(1)A0N00
63	40	0.0027	C	1812	3.3	1.8	4.7	100	DEC1270(1)A5N00	LDED1270(1)A5N00
63	40	0.0027	A	1206	1.7	1.1	3.3	100	DEDA1270(1)A0N00	LDEDA1270(1)A0N00
63	40	0.0033	C	1812	3.3	1.7	4.7	100	DEC1330(1)A5N00	LDED1330(1)A5N00
63	40	0.0033	A	1206	1.7	1.2	3.3	100	DEDA1330(1)A0N00	LDEDA1330(1)A0N00
63	40	0.0039	C	1812	3.3	1.7	4.7	100	DEC1390(1)A5N00	LDED1390(1)A5N00
63	40	0.0039	A	1206	1.7	1.1	3.3	100	DEDA1390(1)A0N00	LDEDA1390(1)A0N00
63	40	0.0047	C	1812	3.3	1.8	4.7	100	DEC1470(1)A5N00	LDED1470(1)A5N00
63	40	0.0047	A	1206	1.7	1.1	3.3	100	DEDA1470(1)A0N00	LDEDA1470(1)A0N00
63	40	0.0056	C	1812	3.3	1.7	4.7	100	DEC1560(1)A5N00	LDED1560(1)A5N00
63	40	0.0056	A	1206	1.7	1.1	3.3	100	DEDA1560(1)A0N00	LDEDA1560(1)A0N00
63	40	0.0068	C	1812	3.3	1.7	4.7	100	DEC1680(1)A5N00	LDED1680(1)A5N00
63	40	0.0068	A	1206	1.7	1.1	3.3	100	DEDA1680(1)A0N00	LDEDA1680(1)A0N00
63	40	0.0082	C	1812	3.3	1.8	4.7	100	DEC1820(1)A5N00	LDED1820(1)A5N00
63	40	0.0082	A	1206	1.7	1.1	3.3	100	DEDA1820(1)A0N00	LDEDA1820(1)A0N00
63	40	0.01	C	1812	3.3	1.7	4.7	100	DEC2100(1)A5N00	LDED2100(1)A5N00
63	40	0.01	A	1206	1.7	1.1	3.3	100	DEDA2100(1)A0N00	LDEDA2100(1)A0N00
63	40	0.012	C	1812	3.3	1.7	4.7	100	DEC2120(1)A5N00	LDED2120(1)A5N00
63	40	0.012	A	1206	1.7	1.1	3.3	100	DEDA2120(1)A0N00	LDEDA2120(1)A0N00
63	40	0.015	C	1812	3.3	1.7	4.7	100	DEC2150(1)A5N00	LDED2150(1)A5N00
63	40	0.015	A	1206	1.7	1.2	3.3	100	DEDA2150(1)A0N00	LDEDA2150(1)A0N00
63	40	0.018	C	1812	3.3	1.8	4.7	100	DEC2180(1)A5N00	LDED2180(1)A5N00
63	40	0.018	A	1206	1.7	1.1	3.3	100	DEDA2180(1)A0N00	LDEDA2180(1)A0N00
63	40	0.022	C	1812	3.3	1.7	4.7	100	DEC2220(1)A5N00	LDED2220(1)A5N00
63	40	0.022	A	1206	1.7	1.1	3.3	100	DEDA2220(1)A0N00	LDEDA2220(1)A0N00
63	40	0.027	C	1812	3.3	1.7	4.7	100	DEC2270(1)A5N00	LDED2270(1)A5N00
63	40	0.027	A	1206	1.7	1.1	3.3	100	DEDA2270(1)A0N00	LDEDA2270(1)A0N00
63	40	0.033	C	1812	3.3	1.8	4.7	100	DEC2330(1)A5N00	LDED2330(1)A5N00
63	40	0.033	B	1210	2.5	2.0	3.3	100	DEDB2330(1)A0N00	LDED2330(1)A0N00
63	40	0.033	A	1206	1.7	1.2	3.3	100	DEDA2330(2)A0N00	LDEDA2330(2)A0N00
63	40	0.039	C	1812	3.3	1.7	4.7	100	DEC2390(1)A5N00	LDED2390(1)A5N00
63	40	0.039	B	1210	2.5	2.1	3.3	100	DEDB2390(1)A0N00	LDED2390(1)A0N00
63	40	0.047	C	1812	3.3	1.7	4.7	100	DEC2470(1)A5N00	LDED2470(1)A5N00
63	40	0.047	B	1210	2.5	2.1	3.3	100	DEDB2470(1)A0N00	LDED2470(1)A0N00
63	40	0.056	C	1812	3.3	1.7	4.7	100	DEC2560(1)A5N00	LDED2560(1)A5N00

(1) $K = \pm 10\%$, $M = \pm 20\%$, $J = \pm 5\%$ on request.(2) Only K and M tolerances available.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code	Chip Size	Dimensions in mm			dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
					B	H	L			
63	40	0.056	B	1210	2.5	1.7	3.3	100	DEDB2560(1)A0N00	LDEDDB2560(1)A0N00
63	40	0.068	C	1812	3.3	1.8	4.7	100	DEDC2680(1)A5N00	LDEDCC2680(1)A5N00
63	40	0.068	B	1210	2.5	2.0	3.3	100	DEDB2680(1)A0N00	LDEDDB2680(1)A0N00
63	40	0.082	C	1812	3.3	2.1	4.7	100	DEDC2820(1)A5N00	LDEDCC2820(1)A5N00
63	40	0.082	B	1210	2.5	2.1	3.3	100	DEDB2820(1)A0N00	LDEDDB2820(1)A0N00
63	40	0.1	C	1812	3.3	2.4	4.7	100	DEDC3100(1)A5N00	LDEDCC3100(1)A5N00
63	40	0.1	B	1210	2.5	2.1	3.3	100	DEDB3100(1)A0N00	LDEDDB3100(1)A0N00
63	40	0.12	C	1812	3.3	1.7	4.7	100	DEDC3120(1)A5N00	LDEDCC3120(1)A5N00
63	40	0.15	C	1812	3.3	1.9	4.7	100	DEDC3150(1)A5N00	LDEDCC3150(1)A5N00
63	40	0.18	C	1812	3.3	2.2	4.7	100	DEDC3180(1)A5N00	LDEDCC3180(1)A5N00
63	40	0.22	C	1812	3.3	2.4	4.7	100	DEDC3220(1)A5N00	LDEDCC3220(1)A5N00
63	40	0.27	D	2220	5.0	1.9	6.0	100	DEDD3270(1)A5N00	LDEDDB3270(1)A5N00
63	40	0.33	D	2220	5.0	1.9	6.0	100	DEDD3330(1)A5N00	LDEDDB3330(1)A5N00
63	40	0.39	D	2220	5.0	2.1	6.0	100	DEDD3390(1)A5N00	LDEDDB3390(1)A5N00
63	40	0.47	D	2220	5.0	2.4	6.0	100	DEDD3470(1)A5N00	LDEDDB3470(1)A5N00
63	40	0.56	D	2220	5.0	2.8	6.0	100	DEDD3560(1)A5N00	LDEDDB3560(1)A5N00
63	40	0.68	D	2220	5.0	3.3	6.0	100	DEDD3680(1)A5N00	LDEDDB3680(1)A5N00
63	40	0.82	E	2824	6.1	2.9	7.3	100	DEDE3820(1)A5N00	LDEDE3820(1)A5N00
63	40	0.82	D	2220	5.0	3.7	6.0	100	DEDD3820(1)A0N00	LDEDDB3820(1)A0N00
63	40	1.0	E	2824	6.1	3.1	7.3	100	DEDE4100(1)A5N00	LDEDE4100(1)A5N00
63	40	1.0	D	2220	5.0	4.4	6.0	100	DEDD4100(1)A0N00	LDEDDB4100(1)A0N00
63	40	1.2	E	2824	6.1	3.6	7.3	100	DEDE4120(1)A5N00	LDEDE4120(1)A5N00
63	40	1.5	G	5040	10.4	3.1	13.0	100	DEDG4150(1)A5N00	LDEDG4150(1)A5N00
63	40	1.5	E	2824	6.1	4.3	7.3	100	DEDE4150(1)A0N00	LDEDE4150(1)A0N00
63	40	1.8	G	5040	10.4	3.4	13.0	100	DEDG4180(1)A5N00	LDEDG4180(1)A5N00
63	40	1.8	E	2824	6.1	5.1	7.3	100	DEDE4180(1)A0N00	LDEDE4180(1)A0N00
63	40	2.2	G	5040	10.4	4.1	13.0	100	DEDG4220(1)A5N00	LDEDG4220(1)A5N00
63	40	2.2	F	4030	7.9	3.3	10.5	100	DEDF4220(1)A0N00	LDEDF4220(1)A0N00
63	40	2.7	G	5040	10.4	4.9	13.0	100	DEDG4270(1)A5N00	LDEDG4270(1)A5N00
63	40	2.7	F	4030	7.9	4.0	10.5	100	DEDF4270(1)A0N00	LDEDF4270(1)A0N00
63	40	3.3	H	6054	13.7	3.9	15.5	100	DEDH4330(1)A5N00	LDEDH4330(1)A5N00
63	40	3.3	F	4030	7.9	4.7	10.5	100	DEDF4330(1)A0N00	LDEDF4330(1)A0N00
63	40	3.9	H	6054	13.7	4.5	15.5	100	DEDH4390(1)A5N00	LDEDH4390(1)A5N00
63	40	3.9	F	4030	7.9	5.5	10.5	100	DEDF4390(1)A0N00	LDEDF4390(1)A0N00
63	40	4.7	H	6054	13.7	5.3	15.5	100	DEDH4470(1)A5N00	LDEDH4470(1)A5N00
63	40	4.7	G	5040	10.4	4.1	13.0	100	DEDG4470(1)A0N00	LDEDG4470(1)A0N00
100	63	0.001	A	1206	1.7	1.1	3.3	100	DEEA1100(1)A0N00	LDEEA1100(1)A0N00
100	63	0.0012	A	1206	1.7	1.1	3.3	100	DEEA1120(1)A0N00	LDEEA1120(1)A0N00
100	63	0.0015	C	1812	3.3	1.7	4.7	100	DEEC1150(1)A5N00	LDEEC1150(1)A5N00
100	63	0.0015	A	1206	1.7	1.1	3.3	100	DEEA1150(1)A0N00	LDEEA1150(1)A0N00
100	63	0.0018	C	1812	3.3	1.7	4.7	100	DEEC1180(1)A5N00	LDEEC1180(1)A5N00
100	63	0.0018	A	1206	1.7	1.1	3.3	100	DEEA1180(1)A0N00	LDEEA1180(1)A0N00
100	63	0.0022	C	1812	3.3	1.7	4.7	100	DEEC1220(1)A5N00	LDEEC1220(1)A5N00
100	63	0.0022	A	1206	1.7	1.1	3.3	100	DEEA1220(1)A0N00	LDEEA1220(1)A0N00
100	63	0.0027	C	1812	3.3	1.8	4.7	100	DEEC1270(1)A5N00	LDEEC1270(1)A5N00
100	63	0.0027	A	1206	1.7	1.1	3.3	100	DEEA1270(1)A0N00	LDEEA1270(1)A0N00
100	63	0.0033	C	1812	3.3	1.7	4.7	100	DEEC1330(1)A5N00	LDEEC1330(1)A5N00
100	63	0.0033	A	1206	1.7	1.2	3.3	100	DEEA1330(1)A0N00	LDEEA1330(1)A0N00
100	63	0.0039	C	1812	3.3	1.7	4.7	100	DEEC1390(1)A5N00	LDEEC1390(1)A5N00
100	63	0.0039	A	1206	1.7	1.1	3.3	100	DEEA1390(1)A0N00	LDEEA1390(1)A0N00
100	63	0.0047	C	1812	3.3	1.8	4.7	100	DEEC1470(1)A5N00	LDEEC1470(1)A5N00
100	63	0.0047	A	1206	1.7	1.1	3.3	100	DEEA1470(1)A0N00	LDEEA1470(1)A0N00
100	63	0.0056	C	1812	3.3	1.7	4.7	100	DEEC1560(1)A5N00	LDEEC1560(1)A5N00
100	63	0.0056	A	1206	1.7	1.1	3.3	100	DEEA1560(1)A0N00	LDEEA1560(1)A0N00
100	63	0.0068	C	1812	3.3	1.7	4.7	100	DEEC1680(1)A5N00	LDEEC1680(1)A5N00
100	63	0.0068	A	1206	1.7	1.1	3.3	100	DEEA1680(1)A0N00	LDEEA1680(1)A0N00
100	63	0.0082	C	1812	3.3	1.8	4.7	100	DEEC1820(1)A5N00	LDEEC1820(1)A5N00
100	63	0.0082	A	1206	1.7	1.1	3.3	100	DEEA1820(1)A0N00	LDEEA1820(1)A0N00
100	63	0.01	C	1812	3.3	1.7	4.7	100	DEEC2100(1)A5N00	LDEEC2100(1)A5N00
100	63	0.01	A	1206	1.7	1.1	3.3	100	DEEA2100(1)A0N00	LDEEA2100(1)A0N00

(1) $K = \pm 10\%$, $M = \pm 20\%$, $J = \pm 5\%$ on request.(2) Only K and M tolerances available.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μF)	Size Code	Chip Size	Dimensions in mm			dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
					B	H	L			
100	63	0.012	C	1812	3.3	1.7	4.7	100	DEEC2120(1)A5N00	LDEEC2120(1)A5N00
100	63	0.012	A	1206	1.7	1.1	3.3	100	DEEA2120(1)A0N00	LDEEA2120(1)A0N00
100	63	0.015	C	1812	3.3	1.7	4.7	100	DEEC2150(1)A5N00	LDEEC2150(1)A5N00
100	63	0.015	A	1206	1.7	1.2	3.3	100	DEEA2150(1)A0N00	LDEEA2150(1)A0N00
100	63	0.018	C	1812	3.3	1.8	4.7	100	DEEC2180(1)A5N00	LDEEC2180(1)A5N00
100	63	0.018	B	1210	2.5	1.5	3.3	100	DEEB2180(1)A0N00	LDEEB2180(1)A0N00
100	63	0.022	C	1812	3.3	1.7	4.7	100	DEEC2220(1)A5N00	LDEEC2220(1)A5N00
100	63	0.022	B	1210	2.5	1.5	3.3	100	DEEB2220(1)A0N00	LDEEB2220(1)A0N00
100	63	0.027	C	1812	3.3	1.7	4.7	100	DEEC2270(1)A5N00	LDEEC2270(1)A5N00
100	63	0.027	B	1210	2.5	1.7	3.3	100	DEEB2270(1)A0N00	LDEEB2270(1)A0N00
100	63	0.033	C	1812	3.3	1.8	4.7	100	DEEC2330(1)A5N00	LDEEC2330(1)A5N00
100	63	0.033	B	1210	2.5	2.0	3.3	100	DEEB2330(1)A0N00	LDEEB2330(1)A0N00
100	63	0.039	C	1812	3.3	1.7	4.7	100	DEEC2390(1)A5N00	LDEEC2390(1)A5N00
100	63	0.039	B	1210	2.5	2.1	3.3	100	DEEB2390(1)A0N00	LDEEB2390(1)A0N00
100	63	0.047	C	1812	3.3	1.7	4.7	100	DEEC2470(1)A5N00	LDEEC2470(1)A5N00
100	63	0.047	B	1210	2.5	2.1	3.3	100	DEEB2470(1)A0N00	LDEEB2470(1)A0N00
100	63	0.056	C	1812	3.3	1.7	4.7	100	DEEC2560(1)A5N00	LDEEC2560(1)A5N00
100	63	0.068	C	1812	3.3	1.8	4.7	100	DEEC2680(1)A5N00	LDEEC2680(1)A5N00
100	63	0.082	C	1812	3.3	2.1	4.7	100	DEEC2820(1)A5N00	LDEEC2820(1)A5N00
100	63	0.1	C	1812	3.3	2.4	4.7	100	DEEC3100(1)A5N00	LDEEC3100(1)A5N00
100	63	0.12	D	2220	5.0	2.6	6.0	100	DEED3120(1)A5N00	LDEED3120(1)A5N00
100	63	0.15	D	2220	5.0	1.9	6.0	100	DEED3150(1)A5N00	LDEED3150(1)A5N00
100	63	0.18	D	2220	5.0	2.0	6.0	100	DEED3180(1)A5N00	LDEED3180(1)A5N00
100	63	0.22	D	2220	5.0	2.4	6.0	100	DEED3220(1)A5N00	LDEED3220(1)A5N00
100	63	0.27	D	2220	5.0	2.8	6.0	100	DEED3270(1)A5N00	LDEED3270(1)A5N00
100	63	0.33	D	2220	5.0	3.3	6.0	100	DEED3330(1)A5N00	LDEED3330(1)A5N00
100	63	0.39	E	2824	6.1	2.6	7.3	100	DEEE3390(1)A5N00	LDEEE3390(1)A5N00
100	63	0.39	D	2220	5.0	3.7	6.0	100	DEED3390(1)A0N00	LDEED3390(1)A0N00
100	63	0.47	E	2824	6.1	3.0	7.3	100	DEEE3470(1)A5N00	LDEEE3470(1)A5N00
100	63	0.47	D	2220	5.0	4.4	6.0	100	DEED3470(1)A0N00	LDEED3470(1)A0N00
100	63	0.56	E	2824	6.1	3.5	7.3	100	DEEE3560(1)A5N00	LDEEE3560(1)A5N00
100	63	0.68	E	2824	6.1	4.1	7.3	100	DEEE3680(1)A5N00	LDEEE3680(1)A5N00
100	63	0.82	F	4030	7.9	2.8	10.5	100	DEEF3820(1)A5N00	LDEEF3820(1)A5N00
100	63	0.82	E	2824	6.1	4.9	7.3	100	DEEE3820(1)A0N00	LDEEE3820(1)A0N00
100	63	1.0	F	4030	7.9	3.2	10.5	100	DEEF4100(1)A5N00	LDEEF4100(1)A5N00
100	63	1.0	E	2824	6.1	5.4	7.3	100	DEEE4100(2)A0N00	LDEEE4100(2)A0N00
100	63	1.2	G	5040	10.4	3.1	13.0	100	DEEG4120(1)A5N00	LDEEG4120(1)A5N00
100	63	1.2	F	4030	7.9	3.7	10.5	100	DEEF4120(1)A0N00	LDEEF4120(1)A0N00
100	63	1.5	G	5040	10.4	3.1	13.0	100	DEEG4150(1)A5N00	LDEEG4150(1)A5N00
100	63	1.5	F	4030	7.9	4.5	10.5	100	DEEF4150(1)A0N00	LDEEF4150(1)A0N00
100	63	1.8	G	5040	10.4	3.4	13.0	100	DEEG4180(1)A5N00	LDEEG4180(1)A5N00
100	63	1.8	F	4030	7.9	5.4	10.5	100	DEEF4180(1)A0N00	LDEEF4180(1)A0N00
100	63	2.2	G	5040	10.4	4.1	13.0	100	DEEG4220(1)A5N00	LDEEG4220(1)A5N00
100	63	2.2	F	4030	7.9	5.6	10.5	100	DEEF4220(2)A0N00	LDEEF4220(2)A0N00
100	63	2.7	H	6054	13.7	3.3	15.5	100	DEEH4270(1)A5N00	LDEEH4270(1)A5N00
100	63	2.7	G	5040	10.4	4.9	13.0	100	DEEG4270(1)A0N00	LDEEG4270(1)A0N00
100	63	3.3	H	6054	13.7	3.9	15.5	100	DEEH4330(1)A5N00	LDEEH4330(1)A5N00
100	63	3.3	G	5040	10.4	5.7	13.0	100	DEEG4330(1)A0N00	LDEEG4330(1)A0N00
100	63	3.9	H	6054	13.7	4.5	15.5	100	DEEH4390(1)A5N00	LDEEH4390(1)A5N00
100	63	4.7	H	6054	13.7	5.3	15.5	100	DEEH4470(1)A5N00	LDEEH4470(1)A5N00
250	120	0.001	A	1206	1.7	1.1	3.3	100	DEIA1100(1)A0N00	LDEIA1100(1)A0N00
250	120	0.0012	A	1206	1.7	1.1	3.3	100	DEIA1120(1)A0N00	LDEIA1120(1)A0N00
250	120	0.0015	C	1812	3.3	1.7	4.7	100	DEIC1150(1)A5N00	LDEIC1150(1)A5N00
250	120	0.0015	A	1206	1.7	1.1	3.3	100	DEIA1150(1)A0N00	LDEIA1150(1)A0N00
250	120	0.0018	C	1812	3.3	1.7	4.7	100	DEIC1180(1)A5N00	LDEIC1180(1)A5N00
250	120	0.0018	A	1206	1.7	1.1	3.3	100	DEIA1180(1)A0N00	LDEIA1180(1)A0N00
250	120	0.0022	C	1812	3.3	1.7	4.7	100	DEIC1220(1)A5N00	LDEIC1220(1)A5N00
250	120	0.0022	A	1206	1.7	1.1	3.3	100	DEIA1220(1)A0N00	LDEIA1220(1)A0N00
250	120	0.0027	C	1812	3.3	1.8	4.7	100	DEIC1270(1)A5N00	LDEIC1270(1)A5N00
250	120	0.0027	A	1206	1.7	1.1	3.3	100	DEIA1270(1)A0N00	LDEIA1270(1)A0N00

(1) $K = \pm 10\%$, $M = \pm 20\%$, $J = \pm 5\%$ on request.(2) Only K and M tolerances available.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code	Chip Size	Dimensions in mm			dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
					B	H	L			
250	120	0.0033	C	1812	3.3	1.7	4.7	100	DEIC1330(1)A5N00	LDEIC1330(1)A5N00
250	120	0.0033	A	1206	1.7	1.2	3.3	100	DEIA1330(1)A0N00	LDEIA1330(1)A0N00
250	120	0.0039	C	1812	3.3	1.7	4.7	100	DEIC1390(1)A5N00	LDEIC1390(1)A5N00
250	120	0.0039	B	1210	2.5	1.6	3.3	100	DEIB1390(1)A0N00	LDEIB1390(1)A0N00
250	120	0.0047	C	1812	3.3	1.8	4.7	100	DEIC1470(1)A5N00	LDEIC1470(1)A5N00
250	120	0.0047	B	1210	2.5	1.6	3.3	100	DEIB1470(1)A0N00	LDEIB1470(1)A0N00
250	120	0.0056	C	1812	3.3	1.7	4.7	100	DEIC1560(1)A5N00	LDEIC1560(1)A5N00
250	120	0.0056	B	1210	2.5	1.6	3.3	100	DEIB1560(1)A0N00	LDEIB1560(1)A0N00
250	120	0.0068	C	1812	3.3	1.7	4.7	100	DEIC1680(1)A5N00	LDEIC1680(1)A5N00
250	120	0.0068	B	1210	2.5	1.8	3.3	100	DEIB1680(1)A0N00	LDEIB1680(1)A0N00
250	120	0.0082	C	1812	3.3	1.8	4.7	100	DEIC1820(1)A5N00	LDEIC1820(1)A5N00
250	120	0.0082	B	1210	2.5	2.0	3.3	100	DEIB1820(1)A0N00	LDEIB1820(1)A0N00
250	120	0.01	C	1812	3.3	1.7	4.7	100	DEIC2100(1)A5N00	LDEIC2100(1)A5N00
250	120	0.01	B	1210	2.5	2.1	3.3	100	DEIB2100(1)A0N00	LDEIB2100(1)A0N00
250	120	0.012	C	1812	3.3	1.7	4.7	100	DEIC2120(1)A5N00	LDEIC2120(1)A5N00
250	120	0.015	C	1812	3.3	1.7	4.7	100	DEIC2150(1)A5N00	LDEIC2150(1)A5N00
250	120	0.018	D	2220	5.0	2.2	6.0	100	DEID2180(1)A5N00	LDEID2180(1)A5N00
250	120	0.018	C	1812	3.3	1.8	4.7	100	DEIC2180(1)A0N00	LDEIC2180(1)A0N00
250	120	0.022	D	2220	5.0	2.5	6.0	100	DEID2220(1)A5N00	LDEID2220(1)A5N00
250	120	0.022	C	1812	3.3	2.2	4.7	100	DEIC2220(1)A0N00	LDEIC2220(1)A0N00
250	120	0.027	D	2220	5.0	2.9	6.0	100	DEID2270(1)A5N00	LDEID2270(1)A5N00
250	120	0.027	C	1812	3.3	2.5	4.7	100	DEIC2270(1)A0N00	LDEIC2270(1)A0N00
250	120	0.033	D	2220	5.0	1.9	6.0	100	DEID2330(1)A5N00	LDEID2330(1)A5N00
250	120	0.033	C	1812	3.3	2.6	4.7	100	DEIC2330(1)A0N00	LDEIC2330(1)A0N00
250	120	0.039	D	2220	5.0	2.1	6.0	100	DEID2390(1)A5N00	LDEID2390(1)A5N00
250	120	0.047	D	2220	5.0	2.3	6.0	100	DEID2470(1)A5N00	LDEID2470(1)A5N00
250	120	0.056	D	2220	5.0	2.6	6.0	100	DEID2560(1)A5N00	LDEID2560(1)A5N00
250	120	0.068	D	2220	5.0	2.8	6.0	100	DEID2680(1)A5N00	LDEID2680(1)A5N00
250	120	0.082	E	2824	6.1	2.6	7.3	100	DEIE2820(1)A5N00	LDEIE2820(1)A5N00
250	120	0.1	E	2824	6.1	2.9	7.3	100	DEIE3100(1)A5N00	LDEIE3100(1)A5N00
250	120	0.12	E	2824	6.1	3.3	7.3	100	DEIE3120(1)A5N00	LDEIE3120(1)A5N00
250	120	0.12	D	2220	5.0	4.4	6.0	100	DEID3120(1)A0N00	LDEID3120(1)A0N00
250	120	0.15	E	2824	6.1	3.8	7.3	100	DEIE3150(1)A5N00	LDEIE3150(1)A5N00
250	120	0.18	F	4030	7.9	2.7	10.5	100	DEIF3180(1)A5N00	LDEIF3180(1)A5N00
250	120	0.18	E	2824	6.1	4.4	7.3	100	DEIE3180(1)A0N00	LDEIE3180(1)A0N00
250	120	0.22	F	4030	7.9	3.1	10.5	100	DEIF3220(1)A5N00	LDEIF3220(1)A5N00
250	120	0.22	E	2824	6.1	5.2	7.3	100	DEIE3220(1)A0N00	LDEIE3220(1)A0N00
250	120	0.27	F	4030	7.9	3.7	10.5	100	DEIF3270(1)A5N00	LDEIF3270(1)A5N00
250	120	0.33	F	4030	7.9	4.3	10.5	100	DEIF3330(1)A5N00	LDEIF3330(1)A5N00
250	120	0.39	G	5040	10.4	3.3	13.0	100	DEIG3390(1)A5N00	LDEIG3390(1)A5N00
250	120	0.39	F	4030	7.9	5.0	10.5	100	DEIF3390(1)A0N00	LDEIF3390(1)A0N00
250	120	0.47	G	5040	10.4	3.8	13.0	100	DEIG3470(1)A5N00	LDEIG3470(1)A5N00
250	120	0.47	F	4030	7.9	5.5	10.5	100	DEIF3470(1)A0N00	LDEIF3470(1)A0N00
250	120	0.56	G	5040	10.4	4.4	13.0	100	DEIG3560(1)A5N00	LDEIG3560(1)A5N00
250	120	0.56	F	4030	7.9	5.5	10.5	100	DEIF3560(1)A0N00	LDEIF3560(1)A0N00
250	120	0.68	H	6054	13.7	3.4	15.5	100	DEIH3680(1)A5N00	LDEIH3680(1)A5N00
250	120	0.68	G	5040	10.4	5.2	13.0	100	DEIG3680(1)A0N00	LDEIG3680(1)A0N00
250	120	0.82	H	6054	13.7	3.9	15.5	100	DEIH3820(1)A5N00	LDEIH3820(1)A5N00
250	120	0.82	G	5040	10.4	5.7	13.0	100	DEIG3820(1)A0N00	LDEIG3820(1)A0N00
250	120	1.0	H	6054	13.7	4.6	15.5	100	DEIH4100(1)A5N00	LDEIH4100(1)A5N00
250	120	1.2	H	6054	13.7	5.4	15.5	100	DEIH4120(1)A0N00	LDEIH4120(1)A0N00
250	120	1.5	H	6054	13.7	5.7	15.5	100	DEIH4150(1)A0N00	LDEIH4150(1)A0N00
400	160	0.015	D	2220	5.0	2.1	6.0	100	DEMID2150(1)A5N00	LDEMD2150(1)A5N00
400	160	0.018	D	2220	5.0	2.2	6.0	100	DEMID2180(1)A5N00	LDEMD2180(1)A5N00
400	160	0.022	D	2220	5.0	2.5	6.0	100	DEMID2220(1)A5N00	LDEMD2220(1)A5N00
400	160	0.027	D	2220	5.0	2.9	6.0	100	DEMID2270(1)A5N00	LDEMD2270(1)A5N00
400	160	0.033	D	2220	5.0	3.4	6.0	100	DEMID2330(1)A5N00	LDEMD2330(1)A5N00
400	160	0.039	D	2220	5.0	3.8	6.0	100	DEMID2390(1)A5N00	LDEMD2390(1)A5N00
400	160	0.047	D	2220	5.0	4.4	6.0	100	DEMID2470(1)A5N00	LDEMD2470(1)A5N00
400	160	0.056	E	2824	6.1	3.5	7.3	100	DEME2560(1)A5N00	LDEME2560(1)A5N00

(1) $K = \pm 10\%$, $M = \pm 20\%$, $J = \pm 5\%$ on request.(2) Only K and M tolerances available.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code	Chip Size	Dimensions in mm			dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
					B	H	L			
400	160	0.068	E	2824	6.1	4.1	7.3	100	DEME2680(1)A5N00	LDEM2680(1)A5N00
400	160	0.082	E	2824	6.1	4.7	7.3	100	DEME2820(1)A5N00	LDEM2820(1)A5N00
400	160	0.1	E	2824	6.1	5.4	7.3	100	DEME3100(1)A5N00	LDEM3100(1)A5N00
400	160	0.12	F	4030	7.9	3.6	10.5	100	DEMFI320(1)A5N00	LDEMFI320(1)A5N00
400	160	0.15	F	4030	7.9	4.4	10.5	100	DEMFI3150(1)A5N00	LDEMFI3150(1)A5N00
400	160	0.18	F	4030	7.9	5.1	10.5	100	DEMFI3180(1)A5N00	LDEMFI3180(1)A5N00
400	160	0.22	G	5040	10.4	3.8	13.0	100	DEMG3220(1)A5N00	LDEMG3220(1)A5N00
400	160	0.27	G	5040	10.4	4.7	13.0	100	DEMG3270(1)A5N00	LDEMG3270(1)A5N00
400	160	0.33	G	5040	10.4	5.6	13.0	100	DEMG3330(1)A5N00	LDEMG3330(1)A5N00
400	160	0.39	H	6054	13.7	4.2	15.5	100	DEMHI3390(1)A5N00	LDEMHI3390(1)A5N00
400	160	0.47	H	6054	13.7	4.8	15.5	100	DEMHI3470(1)A5N00	LDEMHI3470(1)A5N00
630	200	0.001	D	2220	5.0	1.9	6.0	100	DEPD1100(1)A5N00	LDEPD1100(1)A5N00
630	200	0.0012	D	2220	5.0	2.0	6.0	100	DEPD1120(1)A5N00	LDEPD1120(1)A5N00
630	200	0.0015	D	2220	5.0	2.3	6.0	100	DEPD1150(1)A5N00	LDEPD1150(1)A5N00
630	200	0.0018	D	2220	5.0	2.5	6.0	100	DEPD1180(1)A5N00	LDEPD1180(1)A5N00
630	200	0.0022	D	2220	5.0	2.0	6.0	100	DEPD1220(1)A5N00	LDEPD1220(1)A5N00
630	200	0.0027	D	2220	5.0	2.3	6.0	100	DEPD1270(1)A5N00	LDEPD1270(1)A5N00
630	200	0.0033	D	2220	5.0	2.6	6.0	100	DEPD1330(1)A5N00	LDEPD1330(1)A5N00
630	200	0.0039	D	2220	5.0	1.9	6.0	100	DEPD1390(1)A5N00	LDEPD1390(1)A5N00
630	200	0.0047	D	2220	5.0	2.0	6.0	100	DEPD1470(1)A5N00	LDEPD1470(1)A5N00
630	200	0.0056	D	2220	5.0	2.0	6.0	100	DEPD1560(1)A5N00	LDEPD1560(1)A5N00
630	200	0.0068	D	2220	5.0	2.3	6.0	100	DEPD1680(1)A5N00	LDEPD1680(1)A5N00
630	200	0.0082	D	2220	5.0	2.6	6.0	100	DEPD1820(1)A5N00	LDEPD1820(1)A5N00
630	200	0.010	D	2220	5.0	3.0	6.0	100	DEPD2100(1)A5N00	LDEPD2100(1)A5N00
630	200	0.012	D	2220	5.0	3.4	6.0	100	DEPD2120(1)A5N00	LDEPD2120(1)A5N00
630	200	0.015	D	2220	5.0	4.0	6.0	100	DEPD2150(1)A5N00	LDEPD2150(1)A5N00
630	200	0.018	D	2220	5.0	4.4	6.0	100	DEPD2180(1)A5N00	LDEPD2180(1)A5N00
630	200	0.022	E	2824	6.1	3.4	7.3	100	DEPE2220(1)A5N00	LDEPE2220(1)A5N00
630	200	0.027	E	2824	6.1	4.0	7.3	100	DEPE2270(1)A5N00	LDEPE2270(1)A5N00
630	200	0.033	E	2824	6.1	4.7	7.3	100	DEPE2330(1)A5N00	LDEPE2330(1)A5N00
630	200	0.039	E	2824	6.1	5.3	7.3	100	DEPE2390(1)A5N00	LDEPE2390(1)A5N00
630	200	0.047	F	4030	7.9	3.4	10.5	100	DEPF2470(1)A5N00	LDEPF2470(1)A5N00
630	200	0.056	F	4030	7.9	3.9	10.5	100	DEPF2560(1)A5N00	LDEPF2560(1)A5N00
630	200	0.068	F	4030	7.9	4.5	10.5	100	DEPF2680(1)A5N00	LDEPF2680(1)A5N00
630	200	0.082	F	4030	7.9	5.4	10.5	100	DEPF2820(1)A5N00	LDEPF2820(1)A5N00
630	200	0.1	G	5040	10.4	3.9	13.0	100	DEPG3100(1)A5N00	LDEPG3100(1)A5N00
630	200	0.1	F	4030	7.9	5.5	10.5	100	DEPF3100(2)A0N00	LDEPF3100(2)A0N00
630	200	0.12	G	5040	10.4	4.4	13.0	100	DEPG3120(1)A5N00	LDEPG3120(1)A5N00
630	200	0.15	G	5040	10.4	5.3	13.0	100	DEPG3150(1)A5N00	LDEPG3150(1)A5N00
630	200	0.18	H	6054	13.7	4.2	15.5	100	DEPH3180(1)A5N00	LDEPH3180(1)A5N00
630	200	0.22	H	6054	13.7	4.9	15.5	100	DEPH3220(1)A5N00	LDEPH3220(1)A5N00
630	200	0.27	H	6054	13.7	5.7	15.5	100	DEPH3270(2)A5N00	LDEPH3270(2)A5N00
1000	250	0.001	D	2220	5.0	1.9	6.0	300	DEQD1100(1)A5N00	LDEQD1100(1)A5N00
1000	250	0.0012	D	2220	5.0	2.0	6.0	300	DEQD1120(1)A5N00	LDEQD1120(1)A5N00
1000	250	0.0015	D	2220	5.0	2.3	6.0	300	DEQD1150(1)A5N00	LDEQD1150(1)A5N00
1000	250	0.0018	D	2220	5.0	2.5	6.0	300	DEQD1180(1)A5N00	LDEQD1180(1)A5N00
1000	250	0.0022	D	2220	5.0	2.0	6.0	300	DEQD1220(1)A5N00	LDEQD1220(1)A5N00
1000	250	0.0027	D	2220	5.0	2.3	6.0	300	DEQD1270(1)A5N00	LDEQD1270(1)A5N00
1000	250	0.0033	D	2220	5.0	2.6	6.0	300	DEQD1330(1)A5N00	LDEQD1330(1)A5N00
1000	250	0.0039	D	2220	5.0	3.0	6.0	300	DEQD1390(1)A5N00	LDEQD1390(1)A5N00
1000	250	0.0047	D	2220	5.0	3.4	6.0	300	DEQD1470(1)A5N00	LDEQD1470(1)A5N00
1000	250	0.0056	D	2220	5.0	3.9	6.0	300	DEQD1560(1)A5N00	LDEQD1560(1)A5N00
1000	250	0.0068	D	2220	5.0	4.4	6.0	300	DEQD1680(1)A5N00	LDEQD1680(1)A5N00
1000	250	0.0082	E	2824	6.1	2.9	7.3	300	DEQE1820(1)A5N00	LDEQE1820(1)A5N00
1000	250	0.010	E	2824	6.1	3.4	7.3	300	DEQE2100(1)A5N00	LDEQE2100(1)A5N00
1000	250	0.012	E	2824	6.1	4.0	7.3	300	DEQE2120(1)A5N00	LDEQE2120(1)A5N00
1000	250	0.015	E	2824	6.1	4.9	7.3	300	DEQE2150(1)A5N00	LDEQE2150(1)A5N00
1000	250	0.018	E	2824	6.1	5.4	7.3	300	DEQE2180(1)A5N00	LDEQE2180(1)A5N00
1000	250	0.022	F	4030	7.9	3.4	10.5	300	DEQF2220(1)A5N00	LDEQF2220(1)A5N00
1000	250	0.027	F	4030	7.9	4.1	10.5	300	DEQF2270(1)A5N00	LDEQF2270(1)A5N00
VDC	VAC	Cap Value (μ F)	Size Code	Chip Size	B (mm)	H (mm)	L (mm)	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number

(1) $K = \pm 10\%$, $M = \pm 20\%$, $J = \pm 5\%$ on request.(2) Only K and M tolerances available.

Table 1 – Ratings & Part Number Reference cont'd

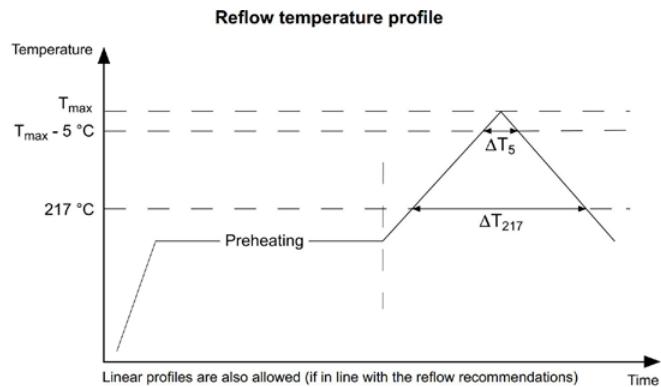
VDC	VAC	Cap Value (μ F)	Size Code	Chip Size	Dimensions in mm			dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
					B	H	L			
1000	250	0.033	F	4030	7.9	4.9	10.5	300	DEQF2330(1)A5N00	LDEQF2330(1)A5N00
1000	250	0.039	G	5040	10.4	3.5	13.0	300	DEQQ2390(1)A5N00	LDEQQ2390(1)A5N00
1000	250	0.047	G	5040	10.4	4.1	13.0	300	DEQQ2470(1)A5N00	LDEQQ2470(1)A5N00
1000	250	0.056	G	5040	10.4	4.7	13.0	300	DEQQ2560(1)A5N00	LDEQQ2560(1)A5N00
1000	250	0.068	G	5040	10.4	5.5	13.0	300	DEQQ2680(1)A5N00	LDEQQ2680(1)A5N00
1000	250	0.082	H	6054	13.7	4.2	15.5	300	DEQH2820(1)A5N00	LDEQH2820(1)A5N00
1000	250	0.1	H	6054	13.7	4.8	15.5	300	DEQH3100(1)A5N00	LDEQH3100(1)A5N00

VDC	VAC	Cap Value (μ F)	Size Code	Chip Size	B (mm)	H (mm)	L (mm)	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
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(1) $K = \pm 10\%$, $M = \pm 20\%$, $J = \pm 5\%$ on request.(2) Only K and M tolerances available.

Soldering Process

Reflow Recommendations	
Preheating	
Maximum Preheating Time	180 seconds
Minimum Temperature	150°C
Maximum Temperature	200°C
Maximum Time within T_{max} and $T_{max} - 5^{\circ}\text{C}$ (ΔT_5)	30 seconds ($T_{max} \leq 250^{\circ}\text{C}$) 10 seconds ($250^{\circ}\text{C} < T_{max} \leq 255^{\circ}\text{C}$)
Maximum Time Over 217°C (ΔT_{217})	150 seconds
Maximum Temperature Ramp Rate	3°C/seconds (heating) 6°C/seconds (cooling)
Second Reflow	
If two reflow processes are needed, be sure that before the second reflow, the temperature on the capacitor's surface is lower than 50°C.	



Maximum Temperature on Component Body (T_{max})

Capacitor	Capacitor Volume (mm ³)		
H_{max} (mm)	< 350	350 – 2,000	> 2,000
< 1.6	255°C *	255°C *	255°C *
1.6 – 2.5	255°C *	250°C	245°C
> 2.5	250°C	245°C	245°C

*In line with JEDEC STD 020D ed. June 2007 with some limitations.

Marking

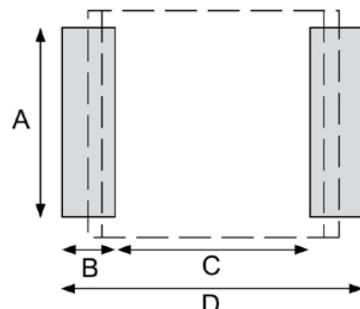
- KEMET
- Capacitance
- Rated voltage

Packaging Quantities

Chip Size (EIA)	Height (mm)	Reel
1206	All	3000
1210	All	2250
1812	≤ 1.9	4000
1812	2.1 – 2.4	3000
2220	≤ 2.8	3000
2220	2.9 – 3.7	2250
2220	3.8 – 4.4	1750
2824	2.6 – 3.6	2250
2824	3.8 – 4.4	1750
2824	4.7 – 5.4	1500
4030	2.7 – 3.7	1500
4030	3.9 – 4.5	1250
4030	4.7 – 5.6	1000
5040	3.1 – 3.5	1500
5040	3.8 – 4.4	1250
5040	4.7 – 5.7	1000
6054	3.3 – 4.2	1000
6054	4.5 – 4.9	750
6054	5.3 – 5.7	750

Landing

Size	Dimensions in mm			
	A	B	C	D
1206	1.5	1.1	2.3	4.5
1210	2.3	1.1	2.3	4.5
1812	3	1.7	3.1	6.5
2220	4.6	2.1	3.9	8.1
2824	5.7	2.3	5.3	9.9
4030	7.4	2.6	8.2	13.4
5040	9.6	2.6	10.7	15.9
6054	12.6	2.6	13.2	18.4



These landing area dimensions have been developed to take full advantage of the new RoHS 6 terminations design.

We suggest to use a Sn/Ag/Cu solder paste (suggested thickness: 0.10 – 0.15 mm).

If a non-lead free solder paste is used, a minimum peak temperature of 210°C on the component's body is suggested.

Overview

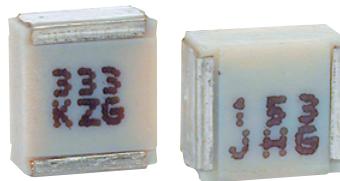
Polyethylene naphthalate (PEN) film capacitor for surface mounting. Encapsulation in self-extinguishing material meeting the requirements of UL 94 V-0.

Applications

Typical applications include bypassing and signal coupling. GMC is a general purpose series designed for the highest reliability.

Benefits

- Rated voltage: 50 – 630 VDC
- Rated voltage: 30 – 300 VAC
- Capacitance range: 0.001 – 5.6 µF
- EIA size: 2220 – 6560
- Capacitance tolerance: ±5%, ±10%, other tolerances on request
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



Legacy Part Number System

GMC	5.7	102	K	50	J31	TR12
Series	Chip Length (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Packaging Code
Metallized PEN	5.7 7.3 10.2 12.7 16.5	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5% K = ±10% Other tolerances on request	50 63 100 250 400 630	See Dimension Table	See Ordering Options Table

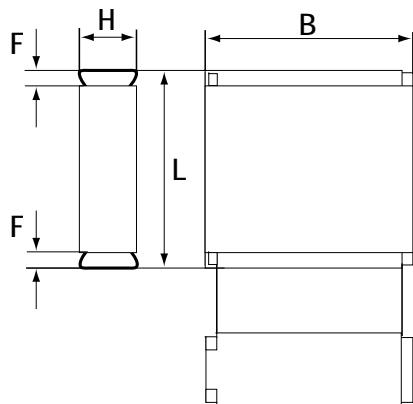
New KEMET Part Number System

F	115	P	L	102	K	050	V
Capacitor Class	Series	Chip Size	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film	Metallized PEN	P = 2220 S = 2824 W = 4036 Y = 5045 Z = 6560	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = ±5% K = ±10% Other tolerances on request	050 = 50 063 = 63 100 = 100 250 = 250 400 = 400 630 = 630	See Ordering Options Table

Ordering Options Table

Chip Size (EIA)	Packaging Type	KEMET Packaging Code	Legacy Packaging Code
2220	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR12
	Bulk (Bag)	A	BULK
2824	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR12
	Bulk (Bag)	A	BULK
4036	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR16
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV24
5045	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR24
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV24
6560	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR24
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV44

Dimensions – Millimeters



KEMET Size Code	Legacy Size Code	Chip Size (EIA)	B		H		L		F	
			Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
PL	J31	2220	5.0	+/-0.2	2.5	+/-0.2	5.7	+/-0.2	0.5	Nominal
PP	J33	2220	5.0	+/-0.2	3.0	+/-0.2	5.7	+/-0.2	0.5	Nominal
PU	J35	2220	5.0	+/-0.2	4.0	+/-0.2	5.7	+/-0.2	0.5	Nominal
SG	K31	2824	6.0	+/-0.2	2.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
SL	K33	2824	6.0	+/-0.2	3.0	+/-0.2	7.3	+/-0.2	0.5	Nominal
SP	K35	2824	6.0	+/-0.2	3.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
ST	K37	2824	6.0	+/-0.2	4.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
WP	A31	4036	9.1	+/-0.2	5.5	+/-0.2	10.2	+/-0.2	0.5	Nominal
YR	B31	5045	11.5	+/-0.2	6.5	+/-0.2	12.7	+/-0.2	0.5	Nominal
ZS	C31	6560	15	+/-0.2	7.0	+/-0.2	16.5	+/-0.2	0.5	Nominal

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.

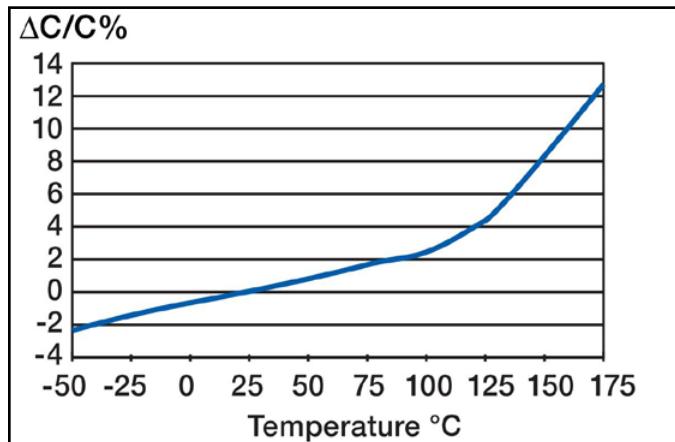


RoHS Compliant

Performance Characteristics

Rated Voltage (VDC)	50	63	100	250	400	630						
Rated Voltage (VAC)	30	40	63	160	200	300						
Capacitance Range (μF)	0.001 – 5.6	0.001 – 4.7	0.001 – 2.2	0.001 – 0.68	0.001 – 0.33	0.022-0.15						
Chip Size (EIA)	2220 – 6560											
Capacitance Tolerance	$\pm 5\%$, $\pm 10\%$, other tolerances on request											
Category Temperature Range	-55°C to +125°C											
Rated Temperature	+100°C											
Voltage Derating	The rated voltage should be decreased with 1.25%/°C from +100°C to +125°C and 1.5%/°C from +125°C to 175°C											
Climatic Category	55/125/56											
Test Voltage	$1.6 \times V_R$, 60 seconds											
Measured at +20°C According to IEC 60384-19												
Minimum Value Between Terminals												
Insulation Resistance			$C \leq 0.33 \mu\text{F}$	$C > 0.33 \mu\text{F}$								
	$V_R \leq 100$		10,000 M Ω	3,000 M $\Omega \cdot \mu\text{F}$								
	$V_R > 100$		30,000 M Ω	10,000 M $\Omega \cdot \mu\text{F}$								
Dissipation Factor	Maximum Values at +23°C											
		$C \leq 0.1 \mu\text{F}$	$0.1 < C \leq 1 \mu\text{F}$	$C > 1 \mu\text{F}$								
		0.6%	0.6%	0.6%								
		1.0%	1.0%	1.0%								
Pulse Rise Time	The capacitors can withstand an unlimited number of pulses with a dV/dt according to Table 1. For voltages (V) lower than the rated voltage (V_R), the specified dV/dt can be multiplied by V_R/V .											

Capacitance vs. Temperature



Dissipation Factor vs. Temperature

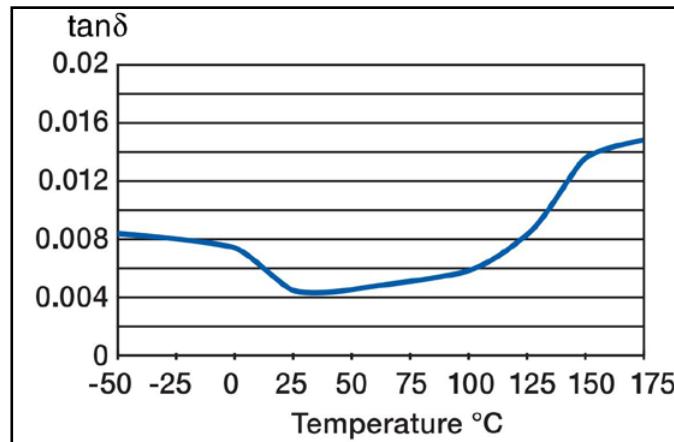


Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.0010	PL/J31	5.0	2.5	5.7	2220	40	F115PL102(1)050(2)	GMC5.7102(1)50J31(2)
50	30	0.0012	PL/J31	5.0	2.5	5.7	2220	40	F115PL122(1)050(2)	GMC5.7122(1)50J31(2)
50	30	0.0015	PL/J31	5.0	2.5	5.7	2220	40	F115PL152(1)050(2)	GMC5.7152(1)50J31(2)
50	30	0.0018	PL/J31	5.0	2.5	5.7	2220	40	F115PL182(1)050(2)	GMC5.7182(1)50J31(2)
50	30	0.0022	PL/J31	5.0	2.5	5.7	2220	40	F115PL222(1)050(2)	GMC5.7222(1)50J31(2)
50	30	0.0027	PL/J31	5.0	2.5	5.7	2220	40	F115PL272(1)050(2)	GMC5.7272(1)50J31(2)
50	30	0.0033	PL/J31	5.0	2.5	5.7	2220	40	F115PL332(1)050(2)	GMC5.7332(1)50J31(2)
50	30	0.0039	PL/J31	5.0	2.5	5.7	2220	40	F115PL392(1)050(2)	GMC5.7392(1)50J31(2)
50	30	0.0047	PL/J31	5.0	2.5	5.7	2220	40	F115PL472(1)050(2)	GMC5.7472(1)50J31(2)
50	30	0.0056	PL/J31	5.0	2.5	5.7	2220	40	F115PL562(1)050(2)	GMC5.7562(1)50J31(2)
50	30	0.0068	PL/J31	5.0	2.5	5.7	2220	40	F115PL682(1)050(2)	GMC5.7682(1)50J31(2)
50	30	0.0082	PL/J31	5.0	2.5	5.7	2220	40	F115PL822(1)050(2)	GMC5.7822(1)50J31(2)
50	30	0.010	PL/J31	5.0	2.5	5.7	2220	40	F115PL103(1)050(2)	GMC5.7103(1)50J31(2)
50	30	0.012	PL/J31	5.0	2.5	5.7	2220	40	F115PL123(1)050(2)	GMC5.7123(1)50J31(2)
50	30	0.015	PL/J31	5.0	2.5	5.7	2220	30	F115PL153(1)050(2)	GMC5.7153(1)50J31(2)
50	30	0.018	PL/J31	5.0	2.5	5.7	2220	30	F115PL183(1)050(2)	GMC5.7183(1)50J31(2)
50	30	0.022	PL/J31	5.0	2.5	5.7	2220	30	F115PL223(1)050(2)	GMC5.7223(1)50J31(2)
50	30	0.027	PL/J31	5.0	2.5	5.7	2220	30	F115PL273(1)050(2)	GMC5.7273(1)50J31(2)
50	30	0.033	PL/J31	5.0	2.5	5.7	2220	20	F115PL333(1)050(2)	GMC5.7333(1)50J31(2)
50	30	0.039	PL/J31	5.0	2.5	5.7	2220	20	F115PL393(1)050(2)	GMC5.7393(1)50J31(2)
50	30	0.047	PL/J31	5.0	2.5	5.7	2220	20	F115PL473(1)050(2)	GMC5.7473(1)50J31(2)
50	30	0.056	PL/J31	5.0	2.5	5.7	2220	20	F115PL563(1)050(2)	GMC5.7563(1)50J31(2)
50	30	0.068	PL/J31	5.0	2.5	5.7	2220	20	F115PL683(1)050(2)	GMC5.7683(1)50J31(2)
50	30	0.082	PL/J31	5.0	2.5	5.7	2220	20	F115PL823(1)050(2)	GMC5.7823(1)50J31(2)
50	30	0.10	PL/J31	5.0	2.5	5.7	2220	20	F115PL104(1)050(2)	GMC5.7104(1)50J31(2)
50	30	0.12	PP/J33	5.0	3.0	5.7	2220	20	F115PP124(1)050(2)	GMC5.7124(1)50J33(2)
50	30	0.15	PU/J35	5.0	4.0	5.7	2220	20	F115PU154(1)050(2)	GMC5.7154(1)50J35(2)
50	30	0.18	PU/J35	5.0	4.0	5.7	2220	20	F115PU184(1)050(2)	GMC5.7184(1)50J35(2)
50	30	0.022	WP/A31	9.1	5.5	10.2	4036	40	F115WP223(1)050(2)	GMC10.2223(1)50A31(2)
50	30	0.027	WP/A31	9.1	5.5	10.2	4036	40	F115WP273(1)050(2)	GMC10.2273(1)50A31(2)
50	30	0.033	WP/A31	9.1	5.5	10.2	4036	40	F115WP333(1)050(2)	GMC10.2333(1)50A31(2)
50	30	0.039	WP/A31	9.1	5.5	10.2	4036	40	F115WP393(1)050(2)	GMC10.2393(1)50A31(2)
50	30	0.047	WP/A31	9.1	5.5	10.2	4036	30	F115WP473(1)050(2)	GMC10.2473(1)50A31(2)
50	30	0.056	WP/A31	9.1	5.5	10.2	4036	30	F115WP563(1)050(2)	GMC10.2563(1)50A31(2)
50	30	0.068	WP/A31	9.1	5.5	10.2	4036	30	F115WP683(1)050(2)	GMC10.2683(1)50A31(2)
50	30	0.082	WP/A31	9.1	5.5	10.2	4036	30	F115WP823(1)050(2)	GMC10.2823(1)50A31(2)
50	30	0.10	WP/A31	9.1	5.5	10.2	4036	30	F115WP104(1)050(2)	GMC10.2104(1)50A31(2)
50	30	0.12	WP/A31	9.1	5.5	10.2	4036	30	F115WP124(1)050(2)	GMC10.2124(1)50A31(2)
50	30	0.15	WP/A31	9.1	5.5	10.2	4036	20	F115WP154(1)050(2)	GMC10.2154(1)50A31(2)
50	30	0.18	WP/A31	9.1	5.5	10.2	4036	20	F115WP184(1)050(2)	GMC10.2184(1)50A31(2)
50	30	0.22	WP/A31	9.1	5.5	10.2	4036	20	F115WP224(1)050(2)	GMC10.2224(1)50A31(2)
50	30	0.27	WP/A31	9.1	5.5	10.2	4036	20	F115WP274(1)050(2)	GMC10.2274(1)50A31(2)
50	30	0.33	WP/A31	9.1	5.5	10.2	4036	20	F115WP334(1)050(2)	GMC10.2334(1)50A31(2)
50	30	0.39	WP/A31	9.1	5.5	10.2	4036	10	F115WP394(1)050(2)	GMC10.2394(1)50A31(2)
50	30	0.47	WP/A31	9.1	5.5	10.2	4036	10	F115WP474(1)050(2)	GMC10.2474(1)50A31(2)
50	30	0.56	WP/A31	9.1	5.5	10.2	4036	10	F115WP564(1)050(2)	GMC10.2564(1)50A31(2)
50	30	0.68	WP/A31	9.1	5.5	10.2	4036	10	F115WP684(1)050(2)	GMC10.2684(1)50A31(2)
50	30	0.82	WP/A31	9.1	5.5	10.2	4036	10	F115WP824(1)050(2)	GMC10.2824(1)50A31(2)
50	30	1.0	WP/A31	9.1	5.5	10.2	4036	10	F115WP105(1)050(2)	GMC10.2105(1)50A31(2)
50	30	1.2	WP/A31	9.1	5.5	10.2	4036	10	F115WP125(1)050(2)	GMC10.2125(1)50A31(2)
50	30	1.5	YR/B31	11.5	6.5	12.7	5045	8	F115YR155(1)050(2)	GMC12.7155(1)50B31(2)
50	30	1.8	YR/B31	11.5	6.5	12.7	5045	8	F115YR185(1)050(2)	GMC12.7185(1)50B31(2)
50	30	2.2	YR/B31	11.5	6.5	12.7	5045	8	F115YR225(1)050(2)	GMC12.7225(1)50B31(2)
50	30	2.7	YR/B31	11.5	6.5	12.7	5045	8	F115YR275(1)050(2)	GMC12.7275(1)50B31(2)
50	30	3.0	YR/B31	11.5	6.5	12.7	5045	8	F115YR305(1)050(2)	GMC12.7305(1)50B31(2)
50	30	3.9	ZS/C31	15.0	7.0	16.5	6560	5	F115ZS395(1)050(2)	GMC16.5395(1)50C31(2)
50	30	4.7	ZS/C31	15.0	7.0	16.5	6560	5	F115ZS475(1)050(2)	GMC16.5475(1)50C31(2)
50	30	5.6	ZS/C31	15.0	7.0	16.5	6560	5	F115ZS565(1)050(2)	GMC16.5565(1)50C31(2)
63	40	0.0010	SG/K31	6.0	2.5	7.3	2824	50	F115SG102(1)063(2)	GMC7.3102(1)63K31(2)

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
63	40	0.0012	SG/K31	6.0	2.5	7.3	2824	50	F115SG122(1)063(2)	GMC7.3122(1)63K31(2)
63	40	0.0015	SG/K31	6.0	2.5	7.3	2824	50	F115SG152(1)063(2)	GMC7.3152(1)63K31(2)
63	40	0.0018	SG/K31	6.0	2.5	7.3	2824	50	F115SG182(1)063(2)	GMC7.3182(1)63K31(2)
63	40	0.0022	SG/K31	6.0	2.5	7.3	2824	50	F115SG222(1)063(2)	GMC7.3222(1)63K31(2)
63	40	0.0027	SG/K31	6.0	2.5	7.3	2824	50	F115SG272(1)063(2)	GMC7.3272(1)63K31(2)
63	40	0.0033	SG/K31	6.0	2.5	7.3	2824	50	F115SG332(1)063(2)	GMC7.3332(1)63K31(2)
63	40	0.0039	SG/K31	6.0	2.5	7.3	2824	50	F115SG392(1)063(2)	GMC7.3392(1)63K31(2)
63	40	0.0047	SG/K31	6.0	2.5	7.3	2824	50	F115SG472(1)063(2)	GMC7.3472(1)63K31(2)
63	40	0.0056	SG/K31	6.0	2.5	7.3	2824	50	F115SG562(1)063(2)	GMC7.3562(1)63K31(2)
63	40	0.0068	SG/K31	6.0	2.5	7.3	2824	40	F115SG682(1)063(2)	GMC7.3682(1)63K31(2)
63	40	0.0082	SG/K31	6.0	2.5	7.3	2824	40	F115SG822(1)063(2)	GMC7.3822(1)63K31(2)
63	40	0.010	SG/K31	6.0	2.5	7.3	2824	40	F115SG103(1)063(2)	GMC7.3103(1)63K31(2)
63	40	0.012	SG/K31	6.0	2.5	7.3	2824	40	F115SG123(1)063(2)	GMC7.3123(1)63K31(2)
63	40	0.015	SG/K31	6.0	2.5	7.3	2824	40	F115SG153(1)063(2)	GMC7.3153(1)63K31(2)
63	40	0.018	SG/K31	6.0	2.5	7.3	2824	40	F115SG183(1)063(2)	GMC7.3183(1)63K31(2)
63	40	0.022	SG/K31	6.0	2.5	7.3	2824	30	F115SG223(1)063(2)	GMC7.3223(1)63K31(2)
63	40	0.027	SG/K31	6.0	2.5	7.3	2824	30	F115SG273(1)063(2)	GMC7.3273(1)63K31(2)
63	40	0.033	SG/K31	6.0	2.5	7.3	2824	30	F115SG333(1)063(2)	GMC7.3333(1)63K31(2)
63	40	0.039	SG/K31	6.0	2.5	7.3	2824	30	F115SG393(1)063(2)	GMC7.3393(1)63K31(2)
63	40	0.047	SG/K31	6.0	2.5	7.3	2824	30	F115SG473(1)063(2)	GMC7.3473(1)63K31(2)
63	40	0.056	SG/K31	6.0	2.5	7.3	2824	30	F115SG563(1)063(2)	GMC7.3563(1)63K31(2)
63	40	0.068	SG/K31	6.0	2.5	7.3	2824	20	F115SG683(1)063(2)	GMC7.3683(1)63K31(2)
63	40	0.082	SG/K31	6.0	2.5	7.3	2824	20	F115SG823(1)063(2)	GMC7.3823(1)63K31(2)
63	40	0.10	SG/K31	6.0	2.5	7.3	2824	20	F115SG104(1)063(2)	GMC7.3104(1)63K31(2)
63	40	0.12	SG/K31	6.0	2.5	7.3	2824	20	F115SG124(1)063(2)	GMC7.3124(1)63K31(2)
63	40	0.15	SG/K31	6.0	2.5	7.3	2824	20	F115SG154(1)063(2)	GMC7.3154(1)63K31(2)
63	40	0.18	SL/K33	6.0	3.0	7.3	2824	20	F115SL184(1)063(2)	GMC7.3184(1)63K33(2)
63	40	0.22	SL/K33	6.0	3.0	7.3	2824	20	F115SL224(1)063(2)	GMC7.3224(1)63K33(2)
63	40	0.27	SP/K35	6.0	3.5	7.3	2824	20	F115SP274(1)063(2)	GMC7.3274(1)63K35(2)
63	40	0.33	SP/K35	6.0	3.5	7.3	2824	20	F115SP334(1)063(2)	GMC7.3334(1)63K35(2)
63	40	0.39	ST/K37	6.0	4.5	7.3	2824	20	F115ST394(1)063(2)	GMC7.3394(1)63K37(2)
63	40	0.022	WP/A31	9.1	5.5	10.2	4036	40	F115WP223(1)063(2)	GMC10.2223(1)63A31(2)
63	40	0.027	WP/A31	9.1	5.5	10.2	4036	40	F115WP273(1)063(2)	GMC10.2273(1)63A31(2)
63	40	0.033	WP/A31	9.1	5.5	10.2	4036	40	F115WP333(1)063(2)	GMC10.2333(1)63A31(2)
63	40	0.039	WP/A31	9.1	5.5	10.2	4036	40	F115WP393(1)063(2)	GMC10.2393(1)63A31(2)
63	40	0.047	WP/A31	9.1	5.5	10.2	4036	30	F115WP473(1)063(2)	GMC10.2473(1)63A31(2)
63	40	0.056	WP/A31	9.1	5.5	10.2	4036	30	F115WP563(1)063(2)	GMC10.2563(1)63A31(2)
63	40	0.068	WP/A31	9.1	5.5	10.2	4036	30	F115WP683(1)063(2)	GMC10.2683(1)63A31(2)
63	40	0.082	WP/A31	9.1	5.5	10.2	4036	30	F115WP823(1)063(2)	GMC10.2823(1)63A31(2)
63	40	0.10	WP/A31	9.1	5.5	10.2	4036	30	F115WP104(1)063(2)	GMC10.2104(1)63A31(2)
63	40	0.12	WP/A31	9.1	5.5	10.2	4036	30	F115WP124(1)063(2)	GMC10.2124(1)63A31(2)
63	40	0.15	WP/A31	9.1	5.5	10.2	4036	20	F115WP154(1)063(2)	GMC10.2154(1)63A31(2)
63	40	0.18	WP/A31	9.1	5.5	10.2	4036	20	F115WP184(1)063(2)	GMC10.2184(1)63A31(2)
63	40	0.22	WP/A31	9.1	5.5	10.2	4036	20	F115WP224(1)063(2)	GMC10.2224(1)63A31(2)
63	40	0.27	WP/A31	9.1	5.5	10.2	4036	20	F115WP274(1)063(2)	GMC10.2274(1)63A31(2)
63	40	0.33	WP/A31	9.1	5.5	10.2	4036	20	F115WP334(1)063(2)	GMC10.2334(1)63A31(2)
63	40	0.39	WP/A31	9.1	5.5	10.2	4036	10	F115WP394(1)063(2)	GMC10.2394(1)63A31(2)
63	40	0.47	WP/A31	9.1	5.5	10.2	4036	10	F115WP474(1)063(2)	GMC10.2474(1)63A31(2)
63	40	0.56	WP/A31	9.1	5.5	10.2	4036	10	F115WP564(1)063(2)	GMC10.2564(1)63A31(2)
63	40	0.68	WP/A31	9.1	5.5	10.2	4036	10	F115WP684(1)063(2)	GMC10.2684(1)63A31(2)
63	40	0.82	WP/A31	9.1	5.5	10.2	4036	10	F115WP824(1)063(2)	GMC10.2824(1)63A31(2)
63	40	1.0	YR/B31	11.5	6.5	12.7	5045	8	F115YR105(1)063(2)	GMC12.7105(1)63B31(2)
63	40	1.2	YR/B31	11.5	6.5	12.7	5045	8	F115YR125(1)063(2)	GMC12.7125(1)63B31(2)
63	40	1.5	YR/B31	11.5	6.5	12.7	5045	8	F115YR155(1)063(2)	GMC12.7155(1)63B31(2)
63	40	1.8	ZS/C31	15.0	7.0	16.5	6560	5	F115ZS185(1)063(2)	GMC16.5185(1)63C31(2)
63	40	2.2	ZS/C31	15.0	7.0	16.5	6560	5	F115ZS225(1)063(2)	GMC16.5225(1)63C31(2)
63	40	2.7	ZS/C31	15.0	7.0	16.5	6560	5	F115ZS275(1)063(2)	GMC16.5275(1)63C31(2)
63	40	3.3	ZS/C31	15.0	7.0	16.5	6560	5	F115ZS335(1)063(2)	GMC16.5335(1)63C31(2)
63	40	3.9	ZS/C31	15.0	7.0	16.5	6560	5	F115ZS395(1)063(2)	GMC16.5395(1)63C31(2)

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
63	40	4.7	ZS/C31	15.0	7.0	16.5	6560	5	F115ZS475(1)063(2)	GMC16.5475(1)63C31(2)
100	63	0.0010	PL/J31	5.0	2.5	5.7	2220	40	F115PL102(1)100(2)	GMC5.7102(1)100J31(2)
100	63	0.0012	PL/J31	5.0	2.5	5.7	2220	40	F115PL122(1)100(2)	GMC5.7122(1)100J31(2)
100	63	0.0015	PL/J31	5.0	2.5	5.7	2220	40	F115PL152(1)100(2)	GMC5.7152(1)100J31(2)
100	63	0.0018	PL/J31	5.0	2.5	5.7	2220	40	F115PL182(1)100(2)	GMC5.7182(1)100J31(2)
100	63	0.0022	PL/J31	5.0	2.5	5.7	2220	40	F115PL222(1)100(2)	GMC5.7222(1)100J31(2)
100	63	0.0027	PL/J31	5.0	2.5	5.7	2220	40	F115PL272(1)100(2)	GMC5.7272(1)100J31(2)
100	63	0.0033	PL/J31	5.0	2.5	5.7	2220	40	F115PL332(1)100(2)	GMC5.7332(1)100J31(2)
100	63	0.0039	PL/J31	5.0	2.5	5.7	2220	40	F115PL392(1)100(2)	GMC5.7392(1)100J31(2)
100	63	0.0047	PL/J31	5.0	2.5	5.7	2220	40	F115PL472(1)100(2)	GMC5.7472(1)100J31(2)
100	63	0.0056	PL/J31	5.0	2.5	5.7	2220	40	F115PL562(1)100(2)	GMC5.7562(1)100J31(2)
100	63	0.0068	PL/J31	5.0	2.5	5.7	2220	40	F115PL682(1)100(2)	GMC5.7682(1)100J31(2)
100	63	0.0082	PL/J31	5.0	2.5	5.7	2220	40	F115PL822(1)100(2)	GMC5.7822(1)100J31(2)
100	63	0.010	PL/J31	5.0	2.5	5.7	2220	40	F115PL103(1)100(2)	GMC5.7103(1)100J31(2)
100	63	0.012	PL/J31	5.0	2.5	5.7	2220	40	F115PL123(1)100(2)	GMC5.7123(1)100J31(2)
100	63	0.015	PL/J31	5.0	2.5	5.7	2220	30	F115PL153(1)100(2)	GMC5.7153(1)100J31(2)
100	63	0.018	PL/J31	5.0	2.5	5.7	2220	30	F115PL183(1)100(2)	GMC5.7183(1)100J31(2)
100	63	0.022	PL/J31	5.0	2.5	5.7	2220	30	F115PL223(1)100(2)	GMC5.7223(1)100J31(2)
100	63	0.027	PP/J33	5.0	3.0	5.7	2220	30	F115PP273(1)100(2)	GMC5.7273(1)100J33(2)
100	63	0.033	PP/J33	5.0	3.0	5.7	2220	30	F115PP333(1)100(2)	GMC5.7333(1)100J33(2)
100	63	0.039	PU/J35	5.0	4.0	5.7	2220	30	F115PU393(1)100(2)	GMC5.7393(1)100J35(2)
100	63	0.047	PU/J35	5.0	4.0	5.7	2220	30	F115PU473(1)100(2)	GMC5.7473(1)100J35(2)
100	63	0.0010	SG/K31	6.0	2.5	7.3	2824	50	F115SG102(1)100(2)	GMC7.3102(1)100K31(2)
100	63	0.0012	SG/K31	6.0	2.5	7.3	2824	50	F115SG122(1)100(2)	GMC7.3122(1)100K31(2)
100	63	0.0015	SG/K31	6.0	2.5	7.3	2824	50	F115SG152(1)100(2)	GMC7.3152(1)100K31(2)
100	63	0.0018	SG/K31	6.0	2.5	7.3	2824	50	F115SG182(1)100(2)	GMC7.3182(1)100K31(2)
100	63	0.0022	SG/K31	6.0	2.5	7.3	2824	50	F115SG222(1)100(2)	GMC7.3222(1)100K31(2)
100	63	0.0027	SG/K31	6.0	2.5	7.3	2824	50	F115SG272(1)100(2)	GMC7.3272(1)100K31(2)
100	63	0.0033	SG/K31	6.0	2.5	7.3	2824	50	F115SG332(1)100(2)	GMC7.3332(1)100K31(2)
100	63	0.0039	SG/K31	6.0	2.5	7.3	2824	50	F115SG392(1)100(2)	GMC7.3392(1)100K31(2)
100	63	0.0047	SG/K31	6.0	2.5	7.3	2824	50	F115SG472(1)100(2)	GMC7.3472(1)100K31(2)
100	63	0.0056	SG/K31	6.0	2.5	7.3	2824	50	F115SG562(1)100(2)	GMC7.3562(1)100K31(2)
100	63	0.0068	SG/K31	6.0	2.5	7.3	2824	40	F115SG682(1)100(2)	GMC7.3682(1)100K31(2)
100	63	0.0082	SG/K31	6.0	2.5	7.3	2824	40	F115SG822(1)100(2)	GMC7.3822(1)100K31(2)
100	63	0.010	SG/K31	6.0	2.5	7.3	2824	40	F115SG103(1)100(2)	GMC7.3103(1)100K31(2)
100	63	0.012	SG/K31	6.0	2.5	7.3	2824	40	F115SG123(1)100(2)	GMC7.3123(1)100K31(2)
100	63	0.015	SG/K31	6.0	2.5	7.3	2824	40	F115SG153(1)100(2)	GMC7.3153(1)100K31(2)
100	63	0.018	SG/K31	6.0	2.5	7.3	2824	40	F115SG183(1)100(2)	GMC7.3183(1)100K31(2)
100	63	0.022	SG/K31	6.0	2.5	7.3	2824	30	F115SG223(1)100(2)	GMC7.3223(1)100K31(2)
100	63	0.027	SG/K31	6.0	2.5	7.3	2824	30	F115SG273(1)100(2)	GMC7.3273(1)100K31(2)
100	63	0.033	SG/K31	6.0	2.5	7.3	2824	30	F115SG333(1)100(2)	GMC7.3333(1)100K31(2)
100	63	0.039	SG/K31	6.0	2.5	7.3	2824	30	F115SG393(1)100(2)	GMC7.3393(1)100K31(2)
100	63	0.047	SG/K31	6.0	2.5	7.3	2824	30	F115SG473(1)100(2)	GMC7.3473(1)100K31(2)
100	63	0.056	SL/K33	6.0	3.0	7.3	2824	30	F115SL563(1)100(2)	GMC7.3563(1)100K33(2)
100	63	0.068	SP/K35	6.0	3.5	7.3	2824	30	F115SP683(1)100(2)	GMC7.3683(1)100K35(2)
100	63	0.082	SP/K35	6.0	3.5	7.3	2824	30	F115SP823(1)100(2)	GMC7.3823(1)100K35(2)
100	63	0.10	ST/K37	6.0	4.5	7.3	2824	30	F115ST104(1)100(2)	GMC7.3104(1)100K37(2)
100	63	0.022	WP/A31	9.1	5.5	10.2	4036	40	F115WP223(1)100(2)	GMC10.2223(1)100A31(2)
100	63	0.027	WP/A31	9.1	5.5	10.2	4036	40	F115WP273(1)100(2)	GMC10.2273(1)100A31(2)
100	63	0.033	WP/A31	9.1	5.5	10.2	4036	40	F115WP333(1)100(2)	GMC10.2333(1)100A31(2)
100	63	0.039	WP/A31	9.1	5.5	10.2	4036	40	F115WP393(1)100(2)	GMC10.2393(1)100A31(2)
100	63	0.047	WP/A31	9.1	5.5	10.2	4036	30	F115WP473(1)100(2)	GMC10.2473(1)100A31(2)
100	63	0.056	WP/A31	9.1	5.5	10.2	4036	30	F115WP563(1)100(2)	GMC10.2563(1)100A31(2)
100	63	0.068	WP/A31	9.1	5.5	10.2	4036	30	F115WP683(1)100(2)	GMC10.2683(1)100A31(2)
100	63	0.082	WP/A31	9.1	5.5	10.2	4036	30	F115WP823(1)100(2)	GMC10.2823(1)100A31(2)
100	63	0.10	WP/A31	9.1	5.5	10.2	4036	30	F115WP104(1)100(2)	GMC10.2104(1)100A31(2)
100	63	0.12	WP/A31	9.1	5.5	10.2	4036	30	F115WP124(1)100(2)	GMC10.2124(1)100A31(2)
100	63	0.15	WP/A31	9.1	5.5	10.2	4036	20	F115WP154(1)100(2)	GMC10.2154(1)100A31(2)
100	63	0.18	WP/A31	9.1	5.5	10.2	4036	20	F115WP184(1)100(2)	GMC10.2184(1)100A31(2)

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
100	63	0.22	WP/A31	9.1	5.5	10.2	4036	20	F115WP224(1)100(2)	GMC10.2224(1)100A31(2)
100	63	0.27	WP/A31	9.1	5.5	10.2	4036	20	F115WP274(1)100(2)	GMC10.2274(1)100A31(2)
100	63	0.33	WP/A31	9.1	5.5	10.2	4036	20	F115WP334(1)100(2)	GMC10.2334(1)100A31(2)
100	63	0.39	YR/B31	11.5	6.5	12.7	5045	12	F115YR394(1)100(2)	GMC12.7394(1)100B31(2)
100	63	0.47	YR/B31	11.5	6.5	12.7	5045	12	F115YR474(1)100(2)	GMC12.7474(1)100B31(2)
100	63	0.56	YR/B31	11.5	6.5	12.7	5045	12	F115YR564(1)100(2)	GMC12.7564(1)100B31(2)
100	63	0.68	YR/B31	11.5	6.5	12.7	5045	12	F115YR684(1)100(2)	GMC12.7684(1)100B31(2)
100	63	0.82	ZS/C31	15.0	7.0	16.5	6560	8	F115ZS824(1)100(2)	GMC16.5824(1)100C31(2)
100	63	1.0	ZS/C31	15.0	7.0	16.5	6560	8	F115ZS105(1)100(2)	GMC16.5105(1)100C31(2)
100	63	1.2	ZS/C31	15.0	7.0	16.5	6560	8	F115ZS125(1)100(2)	GMC16.5125(1)100C31(2)
100	63	1.5	ZS/C31	15.0	7.0	16.5	6560	8	F115ZS155(1)100(2)	GMC16.5155(1)100C31(2)
100	63	1.8	ZS/C31	15.0	7.0	16.5	6560	8	F115ZS185(1)100(2)	GMC16.5185(1)100C31(2)
100	63	2.2	ZS/C31	15.0	7.0	16.5	6560	8	F115ZS225(1)100(2)	GMC16.5225(1)100C31(2)
250	160	0.0010	PL/J31	5.0	2.5	5.7	2220	40	F115PL102(1)250(2)	GMC5.7102(1)250J31(2)
250	160	0.0012	PL/J31	5.0	2.5	5.7	2220	40	F115PL122(1)250(2)	GMC5.7122(1)250J31(2)
250	160	0.0015	PL/J31	5.0	2.5	5.7	2220	40	F115PL152(1)250(2)	GMC5.7152(1)250J31(2)
250	160	0.0018	PL/J31	5.0	2.5	5.7	2220	40	F115PL182(1)250(2)	GMC5.7182(1)250J31(2)
250	160	0.0022	PL/J31	5.0	2.5	5.7	2220	40	F115PL222(1)250(2)	GMC5.7222(1)250J31(2)
250	160	0.0027	PL/J31	5.0	2.5	5.7	2220	40	F115PL272(1)250(2)	GMC5.7272(1)250J31(2)
250	160	0.0033	PL/J31	5.0	2.5	5.7	2220	40	F115PL332(1)250(2)	GMC5.7332(1)250J31(2)
250	160	0.0039	PL/J31	5.0	2.5	5.7	2220	40	F115PL392(1)250(2)	GMC5.7392(1)250J31(2)
250	160	0.0047	PL/J31	5.0	2.5	5.7	2220	40	F115PL472(1)250(2)	GMC5.7472(1)250J31(2)
250	160	0.0056	PL/J31	5.0	2.5	5.7	2220	40	F115PL562(1)250(2)	GMC5.7562(1)250J31(2)
250	160	0.0068	PL/J31	5.0	2.5	5.7	2220	40	F115PL682(1)250(2)	GMC5.7682(1)250J31(2)
250	160	0.0082	PL/J31	5.0	2.5	5.7	2220	40	F115PL822(1)250(2)	GMC5.7822(1)250J31(2)
250	160	0.010	PL/J31	5.0	2.5	5.7	2220	40	F115PL103(1)250(2)	GMC5.7103(1)250J31(2)
250	160	0.012	PP/J33	5.0	3.0	5.7	2220	40	F115PP123(1)250(2)	GMC5.7123(1)250J33(2)
250	160	0.015	PP/J33	5.0	3.0	5.7	2220	40	F115PP153(1)250(2)	GMC5.7153(1)250J33(2)
250	160	0.018	PP/J33	5.0	3.0	5.7	2220	40	F115PP183(1)250(2)	GMC5.7183(1)250J33(2)
250	160	0.022	PU/J35	5.0	4.0	5.7	2220	40	F115PU223(1)250(2)	GMC5.7223(1)250J35(2)
250	160	0.0010	SG/K31	6.0	2.5	7.3	2824	50	F115SG102(1)250(2)	GMC7.3102(1)250K31(2)
250	160	0.0012	SG/K31	6.0	2.5	7.3	2824	50	F115SG122(1)250(2)	GMC7.3122(1)250K31(2)
250	160	0.0015	SG/K31	6.0	2.5	7.3	2824	50	F115SG152(1)250(2)	GMC7.3152(1)250K31(2)
250	160	0.0018	SG/K31	6.0	2.5	7.3	2824	50	F115SG182(1)250(2)	GMC7.3182(1)250K31(2)
250	160	0.0022	SG/K31	6.0	2.5	7.3	2824	50	F115SG222(1)250(2)	GMC7.3222(1)250K31(2)
250	160	0.0027	SG/K31	6.0	2.5	7.3	2824	50	F115SG272(1)250(2)	GMC7.3272(1)250K31(2)
250	160	0.0033	SG/K31	6.0	2.5	7.3	2824	50	F115SG332(1)250(2)	GMC7.3332(1)250K31(2)
250	160	0.0039	SG/K31	6.0	2.5	7.3	2824	50	F115SG392(1)250(2)	GMC7.3392(1)250K31(2)
250	160	0.0047	SG/K31	6.0	2.5	7.3	2824	50	F115SG472(1)250(2)	GMC7.3472(1)250K31(2)
250	160	0.0056	SG/K31	6.0	2.5	7.3	2824	50	F115SG562(1)250(2)	GMC7.3562(1)250K31(2)
250	160	0.0068	SG/K31	6.0	2.5	7.3	2824	40	F115SG682(1)250(2)	GMC7.3682(1)250K31(2)
250	160	0.0082	SG/K31	6.0	2.5	7.3	2824	40	F115SG822(1)250(2)	GMC7.3822(1)250K31(2)
250	160	0.010	SG/K31	6.0	2.5	7.3	2824	40	F115SG103(1)250(2)	GMC7.3103(1)250K31(2)
250	160	0.012	SG/K31	6.0	2.5	7.3	2824	40	F115SG123(1)250(2)	GMC7.3123(1)250K31(2)
250	160	0.015	SG/K31	6.0	2.5	7.3	2824	40	F115SG153(1)250(2)	GMC7.3153(1)250K31(2)
250	160	0.018	SL/K33	6.0	3.0	7.3	2824	40	F115SL183(1)250(2)	GMC7.3183(1)250K33(2)
250	160	0.022	SL/K33	6.0	3.0	7.3	2824	40	F115SL223(1)250(2)	GMC7.3223(1)250K33(2)
250	160	0.027	SP/K35	6.0	3.5	7.3	2824	40	F115SP273(1)250(2)	GMC7.3273(1)250K35(2)
250	160	0.033	ST/K37	6.0	4.5	7.3	2824	30	F115ST333(1)250(2)	GMC7.3333(1)250K37(2)
250	160	0.039	ST/K37	6.0	4.5	7.3	2824	30	F115ST393(1)250(2)	GMC7.3393(1)250K37(2)
250	160	0.047	WP/A31	9.1	5.5	10.2	4036	40	F115WP223(1)250(2)	GMC10.2223(1)250A31(2)
250	160	0.052	WP/A31	9.1	5.5	10.2	4036	40	F115WP273(1)250(2)	GMC10.2273(1)250A31(2)
250	160	0.053	WP/A31	9.1	5.5	10.2	4036	40	F115WP333(1)250(2)	GMC10.2333(1)250A31(2)
250	160	0.059	WP/A31	9.1	5.5	10.2	4036	40	F115WP393(1)250(2)	GMC10.2393(1)250A31(2)
250	160	0.047	WP/A31	9.1	5.5	10.2	4036	30	F115WP473(1)250(2)	GMC10.2473(1)250A31(2)
250	160	0.056	WP/A31	9.1	5.5	10.2	4036	30	F115WP563(1)250(2)	GMC10.2563(1)250A31(2)
250	160	0.068	WP/A31	9.1	5.5	10.2	4036	30	F115WP683(1)250(2)	GMC10.2683(1)250A31(2)
250	160	0.082	WP/A31	9.1	5.5	10.2	4036	30	F115WP823(1)250(2)	GMC10.2823(1)250A31(2)
250	160	0.10	WP/A31	9.1	5.5	10.2	4036	30	F115WP104(1)250(2)	GMC10.2104(1)250A31(2)

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

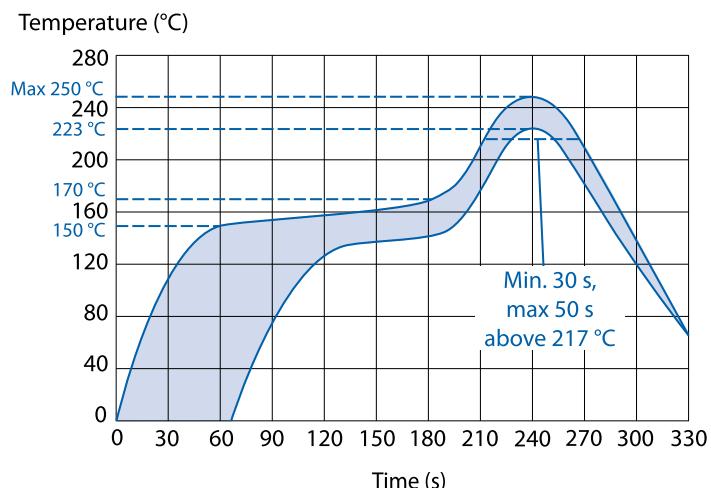
VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
250	160	0.12	WP/A31	9.1	5.5	10.2	4036	30	F115WP124(1)250(2)	GMC10.2124(1)250A31(2)
250	160	0.15	WP/A31	9.1	5.5	10.2	4036	30	F115WP154(1)250(2)	GMC10.2154(1)250A31(2)
250	160	0.18	YR/B31	11.5	6.5	12.7	5045	20	F115YR184(1)250(2)	GMC12.7184(1)250B31(2)
250	160	0.22	YR/B31	11.5	6.5	12.7	5045	20	F115YR224(1)250(2)	GMC12.7224(1)250B31(2)
250	160	0.27	YR/B31	11.5	6.5	12.7	5045	20	F115YR274(1)250(2)	GMC12.7274(1)250B31(2)
250	160	0.33	YR/B31	11.5	6.5	12.7	5045	20	F115YR334(1)250(2)	GMC12.7334(1)250B31(2)
250	160	0.39	ZS/C31	15.0	7.0	16.5	6560	12	F115ZS394(1)250(2)	GMC16.5394(1)250C31(2)
250	160	0.47	ZS/C31	15.0	7.0	16.5	6560	12	F115ZS474(1)250(2)	GMC16.5474(1)250C31(2)
250	160	0.56	ZS/C31	15.0	7.0	16.5	6560	12	F115ZS564(1)250(2)	GMC16.5564(1)250C31(2)
250	160	0.68	ZS/C31	15.0	7.0	16.5	6560	12	F115ZS684(1)250(2)	GMC16.5684(1)250C31(2)
400	200	0.0010	SG/K31	6.0	2.5	7.3	2824	50	F115SG102(1)400(2)	GMC7.3102(1)400K31(2)
400	200	0.0012	SG/K31	6.0	2.5	7.3	2824	50	F115SG122(1)400(2)	GMC7.3122(1)400K31(2)
400	200	0.0015	SG/K31	6.0	2.5	7.3	2824	50	F115SG152(1)400(2)	GMC7.3152(1)400K31(2)
400	200	0.0018	SG/K31	6.0	2.5	7.3	2824	50	F115SG182(1)400(2)	GMC7.3182(1)400K31(2)
400	200	0.0022	SG/K31	6.0	2.5	7.3	2824	50	F115SG222(1)400(2)	GMC7.3222(1)400K31(2)
400	200	0.0027	SG/K31	6.0	2.5	7.3	2824	50	F115SG272(1)400(2)	GMC7.3272(1)400K31(2)
400	200	0.0033	SG/K31	6.0	2.5	7.3	2824	50	F115SG332(1)400(2)	GMC7.3332(1)400K31(2)
400	200	0.0039	SG/K31	6.0	2.5	7.3	2824	50	F115SG392(1)400(2)	GMC7.3392(1)400K31(2)
400	200	0.0047	SG/K31	6.0	2.5	7.3	2824	50	F115SG472(1)400(2)	GMC7.3472(1)400K31(2)
400	200	0.0056	SG/K31	6.0	2.5	7.3	2824	50	F115SG562(1)400(2)	GMC7.3562(1)400K31(2)
400	200	0.0068	SL/K33	6.0	3.0	7.3	2824	50	F115SL682(1)400(2)	GMC7.3682(1)400K33(2)
400	200	0.0082	SP/K35	6.0	3.5	7.3	2824	50	F115SP822(1)400(2)	GMC7.3822(1)400K35(2)
400	200	0.010	SP/K35	6.0	3.5	7.3	2824	50	F115SP103(1)400(2)	GMC7.3103(1)400K35(2)
400	200	0.012	SP/K35	6.0	3.5	7.3	2824	50	F115SP123(1)400(2)	GMC7.3123(1)400K35(2)
400	200	0.015	ST/K37	6.0	4.5	7.3	2824	50	F115ST153(1)400(2)	GMC7.3153(1)400K37(2)
400	200	0.022	WP/A31	9.1	5.5	10.2	4036	40	F115WP223(1)400(2)	GMC10.2223(1)400A31(2)
400	200	0.027	WP/A31	9.1	5.5	10.2	4036	40	F115WP273(1)400(2)	GMC10.2273(1)400A31(2)
400	200	0.033	WP/A31	9.1	5.5	10.2	4036	40	F115WP333(1)400(2)	GMC10.2333(1)400A31(2)
400	200	0.039	WP/A31	9.1	5.5	10.2	4036	40	F115WP393(1)400(2)	GMC10.2393(1)400A31(2)
400	200	0.047	WP/A31	9.1	5.5	10.2	4036	40	F115WP473(1)400(2)	GMC10.2473(1)400A31(2)
400	200	0.056	YR/B31	11.5	6.5	12.7	5045	30	F115YR563(1)400(2)	GMC12.7563(1)400B31(2)
400	200	0.068	YR/B31	11.5	6.5	12.7	5045	30	F115YR683(1)400(2)	GMC12.7683(1)400B31(2)
400	200	0.082	YR/B31	11.5	6.5	12.7	5045	30	F115YR823(1)400(2)	GMC12.7823(1)400B31(2)
400	200	0.10	YR/B31	11.5	6.5	12.7	5045	30	F115YR104(1)400(2)	GMC12.7104(1)400B31(2)
400	200	0.12	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS124(1)400(2)	GMC16.5124(1)400C31(2)
400	200	0.15	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS154(1)400(2)	GMC16.5154(1)400C31(2)
400	200	0.18	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS184(1)400(2)	GMC16.5184(1)400C31(2)
400	200	0.22	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS224(1)400(2)	GMC16.5224(1)400C31(2)
400	200	0.27	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS274(1)400(2)	GMC16.5274(1)400C31(2)
400	200	0.33	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS334(1)400(2)	GMC16.5334(1)400C31(2)
630	300	0.022	WP/A31	9.1	5.5	10.2	4036	40	F115WP223(1)630(2)	GMC10.2223(1)630A31(2)
630	300	0.027	YR/B31	11.5	6.5	12.7	5045	30	F115YR273(1)630(2)	GMC12.7273(1)630B31(2)
630	300	0.033	YR/B31	11.5	6.5	12.7	5045	30	F115YR333(1)630(2)	GMC12.7333(1)630B31(2)
630	300	0.039	YR/B31	11.5	6.5	12.7	5045	30	F115YR393(1)630(2)	GMC12.7393(1)630B31(2)
630	300	0.047	YR/B31	11.5	6.5	12.7	5045	30	F115YR473(1)630(2)	GMC12.7473(1)630B31(2)
630	300	0.056	YR/B31	11.5	6.5	12.7	5045	30	F115YR563(1)630(2)	GMC12.7563(1)630B31(2)
630	300	0.068	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS683(1)630(2)	GMC16.5683(1)630C31(2)
630	300	0.082	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS823(1)630(2)	GMC16.5823(1)630C31(2)
630	300	0.10	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS104(1)630(2)	GMC16.5104(1)630C31(2)
630	300	0.12	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS124(1)630(2)	GMC16.5124(1)630C31(2)
630	300	0.15	ZS/C31	15.0	7.0	16.5	6560	20	F115ZS154(1)630(2)	GMC16.5154(1)630C31(2)
VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number

(1) $J = \pm 5\%$, $K = \pm 10\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 250°C.



Marking

- Capacitance
- Capacitance tolerance code
- Rated voltage code
- Capacitor type G for GMC
- Manufacturing date code

Packaging Quantities

Chip Size (EIA)	Base (mm)	Height (mm)	Length (mm)	Bulk	Reel Horizontal Orientation	Reel Vertical Orientation
2220	5	2.5	5.7	2000	3100	
2220	5	3	5.7	2000	2400	
2220	5	4	5.7	2000	2100	
2824	6	2.5	7.3	2000	3100	
2824	6	3	7.3	2000	2500	
2824	6	3.5	7.3	2000	2300	
2824	6	4.5	7.3	1000	1700	
4036	9.1	5.5	10.2	1000	800	500
5045	11.5	6.5	12.7	1000	600	400
6560	15	7	16.5	800	500	200

General Purpose, High Stability and AC Line EMI Suppression
**GPC Series Encapsulated Double Metallized,
Size 2824 – 6560, 63 – 1,000 VDC**

The Capacitance Company
KEMET
CHARGED.[®]

Overview

Film capacitor for surface mounting. Double sided metallized polyethylene naphthalate (PEN) as electrode. Clear PEN as dielectric. Rugged box encapsulation in self-extinguishing material meeting the requirements of UL 94 V-0.

Applications

The GPC Series is designed for high frequency coupling and decoupling as well as general high speed applications requiring high dV/dt such as pulse operation in switched-mode power supply (SMPS).

Benefits

- Rated voltage: 63 – 1,000 VDC
- Rated voltage: 40 – 350 VAC
- Capacitance range: 0.00047 – 1.0 μ F
- EIA size: 2824 – 6560
- Capacitance tolerance: $\pm 10\%$, $\pm 20\%$, other tolerances on request
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



Legacy Part Number System

GPC	7.3	471	K	63	K31	TR12
Series	Chip Length (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Packaging Code
Double Metallized PEN	7.3 10.2 12.7 16.5	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	K = $\pm 10\%$ M = $\pm 20\%$ Other tolerances on request	63 100 160 250 400 630 1,000	See Dimension Table	See Ordering Options Table

New KEMET Part Number System

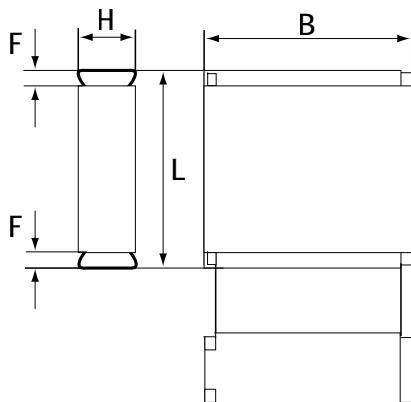
F	117	S	G	471	K	063	V
Capacitor Class	Series	Chip Size	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film	Double Metallized PEN	S = 2824 W = 4036 Y = 5045 Z = 6560	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	K = $\pm 10\%$ M = $\pm 20\%$ Other tolerances on request	063 = 63 100 = 100 160 = 160 250 = 250 400 = 400 630 = 630 1K0 = 1,000	See Ordering Options Table

One world. One KEMET

Ordering Options Table

Chip Size (EIA)	Packaging Type	KEMET Packaging Code	Legacy Packaging Code
2824	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR12
	Bulk (Bag)	A	BULK
4036	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR16
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV24
5045	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR24
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV24
6560	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR24
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV44

Dimensions – Millimeters



KEMET Size Code	Legacy Size Code	Chip Size (EIA)	B		H		L		F	
			Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
SG	K31	2824	6.0	+/-0.2	2.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
SL	K33	2824	6.0	+/-0.2	3.0	+/-0.2	7.3	+/-0.2	0.5	Nominal
SP	K35	2824	6.0	+/-0.2	3.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
ST	K37	2824	6.0	+/-0.2	4.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
WP	A31	4036	9.1	+/-0.2	5.5	+/-0.2	10.2	+/-0.2	0.5	Nominal
YR	B31	5045	11.5	+/-0.2	6.5	+/-0.2	12.7	+/-0.2	0.5	Nominal
ZS	C31	6560	15	+/-0.2	7.0	+/-0.2	16.5	+/-0.2	0.5	Nominal

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.

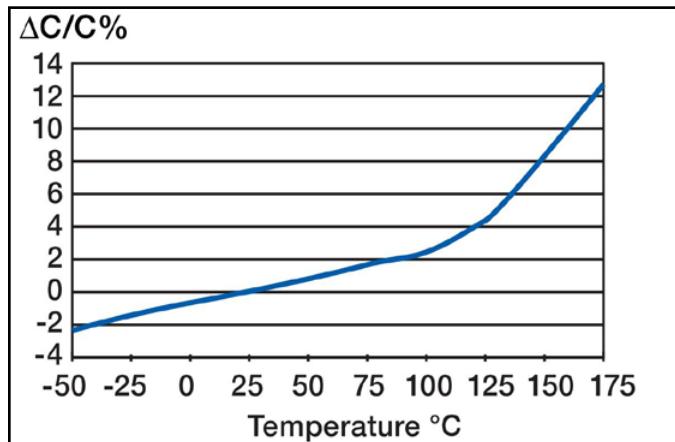


RoHS Compliant

Performance Characteristics

Rated Voltage (VDC)	63	100	160	250	400	630	1,000
Rated Voltage (VAC)	40	63	100	160	200	300	350
Capacitance Range (μF)	0.00047 – 1	0.00047 – 1	0.00047 – 0.68	0.00047 – 0.47	0.00047 – 0.22	0.00047 – 0.1	0.00047 – 0.68
Chip Size (EIA)	2824 – 6560						
Capacitance Tolerance	$\pm 10\%$, $\pm 20\%$, other tolerances on request						
Category Temperature Range	-55°C to +125°C						
Rated Temperature	+100°C						
Voltage Derating	The rated voltage should be decreased with 1.25%/°C from +100°C to +125°C and 1.5%/°C from +125°C to 175°C.						
Climatic Category	55/125/56						
Test Voltage	$1.6 \times V_R$, 60 seconds						
Insulation Resistance	Measured at +20°C According to IEC 60384-19						
	Minimum Value Between Terminals						
			$C \leq 0.33 \mu\text{F}$	$C > 0.33 \mu\text{F}$			
	$V_R \leq 100$		10,000 MΩ	5,000 MΩ • μF			
	$V_R > 100$		30,000 MΩ	10,000 MΩ • μF			
Dissipation Factor	Maximum Values at +23°C						
		$C \leq 0.1 \mu\text{F}$		$0.1 < C \leq 1 \mu\text{F}$	$C > 1 \mu\text{F}$		
		1 kHz	0.6%	0.6%	0.6%		
		10 kHz	1.0%	1.0%	1.2%		
Pulse Rise Time	The capacitors can withstand an unlimited number of pulses with a dV/dt according to Table 1. For voltages (V) lower than the rated voltage (V_R), the specified dV/dt can be multiplied by V_R/V .						

Capacitance vs. Temperature



Dissipation Factor vs. Temperature

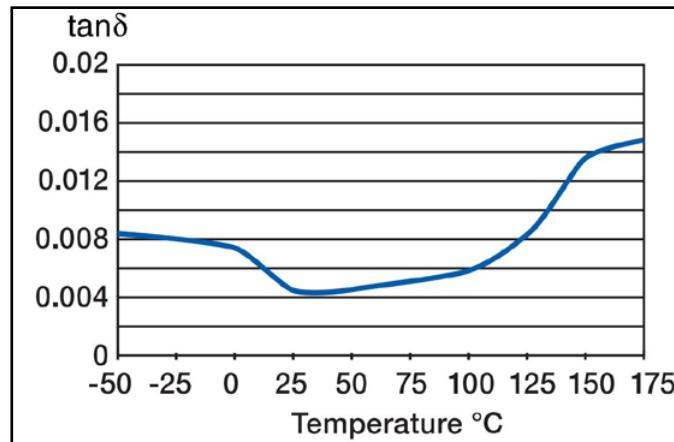


Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
63	40	0.00047	SG/K31	6.0	2.5	7.3	2824	400	F117SG471(1)063(2)	GPC7.3471(1)63K31(2)
63	40	0.00068	SG/K31	6.0	2.5	7.3	2824	400	F117SG681(1)063(2)	GPC7.3681(1)63K31(2)
63	40	0.0010	SG/K31	6.0	2.5	7.3	2824	400	F117SG102(1)063(2)	GPC7.3102(1)63K31(2)
63	40	0.0015	SG/K31	6.0	2.5	7.3	2824	400	F117SG152(1)063(2)	GPC7.3152(1)63K31(2)
63	40	0.0022	SG/K31	6.0	2.5	7.3	2824	400	F117SG222(1)063(2)	GPC7.3222(1)63K31(2)
63	40	0.0033	SG/K31	6.0	2.5	7.3	2824	400	F117SG332(1)063(2)	GPC7.3332(1)63K31(2)
63	40	0.0047	SG/K31	6.0	2.5	7.3	2824	400	F117SG472(1)063(2)	GPC7.3472(1)63K31(2)
63	40	0.0068	SG/K31	6.0	2.5	7.3	2824	400	F117SG682(1)063(2)	GPC7.3682(1)63K31(2)
63	40	0.010	SG/K31	6.0	2.5	7.3	2824	400	F117SG103(1)063(2)	GPC7.3103(1)63K31(2)
63	40	0.015	SG/K31	6.0	2.5	7.3	2824	400	F117SG153(1)063(2)	GPC7.3153(1)63K31(2)
63	40	0.022	SG/K31	6.0	2.5	7.3	2824	400	F117SG223(1)063(2)	GPC7.3223(1)63K31(2)
63	40	0.033	SL/K33	6.0	3.0	7.3	2824	400	F117SL333(1)063(2)	GPC7.3333(1)63K33(2)
63	40	0.047	SL/K33	6.0	3.0	7.3	2824	400	F117SL473(1)063(2)	GPC7.3473(1)63K33(2)
63	40	0.068	SP/K35	6.0	3.5	7.3	2824	400	F117SP683(1)063(2)	GPC7.3683(1)63K35(2)
63	40	0.10	ST/K37	6.0	4.5	7.3	2824	400	F117ST104(1)063(2)	GPC7.3104(1)63K37(2)
63	40	0.0068	WP/A31	9.1	5.5	10.2	4036	300	F117WP682(1)063(2)	GPC10.2682(1)63A31(2)
63	40	0.010	WP/A31	9.1	5.5	10.2	4036	300	F117WP103(1)063(2)	GPC10.2103(1)63A31(2)
63	40	0.015	WP/A31	9.1	5.5	10.2	4036	300	F117WP153(1)063(2)	GPC10.2153(1)63A31(2)
63	40	0.022	WP/A31	9.1	5.5	10.2	4036	300	F117WP223(1)063(2)	GPC10.2223(1)63A31(2)
63	40	0.027	WP/A31	9.1	5.5	10.2	4036	300	F117WP273(1)063(2)	GPC10.2273(1)63A31(2)
63	40	0.033	WP/A31	9.1	5.5	10.2	4036	300	F117WP333(1)063(2)	GPC10.2333(1)63A31(2)
63	40	0.047	WP/A31	9.1	5.5	10.2	4036	300	F117WP473(1)063(2)	GPC10.2473(1)63A31(2)
63	40	0.068	WP/A31	9.1	5.5	10.2	4036	300	F117WP683(1)063(2)	GPC10.2683(1)63A31(2)
63	40	0.10	WP/A31	9.1	5.5	10.2	4036	300	F117WP104(1)063(2)	GPC10.2104(1)63A31(2)
63	40	0.15	WP/A31	9.1	5.5	10.2	4036	300	F117WP154(1)063(2)	GPC10.2154(1)63A31(2)
63	40	0.22	WP/A31	9.1	5.5	10.2	4036	300	F117WP224(1)063(2)	GPC10.2224(1)63A31(2)
63	40	0.33	WP/A31	9.1	5.5	10.2	4036	300	F117WP334(1)063(2)	GPC10.2334(1)63A31(2)
63	40	0.47	YR/B31	11.5	6.5	12.7	5045	200	F117YR474(1)063(2)	GPC12.7474(1)63B31(2)
63	40	0.68	ZS/C31	15.0	7.0	16.5	6560	100	F117ZS684(1)063(2)	GPC16.5684(1)63C31(2)
63	40	1.0	ZS/C31	15.0	7.0	16.5	6560	100	F117ZS105(1)063(2)	GPC16.5105(1)63C31(2)
100	63	0.00047	SG/K31	6.0	2.5	7.3	2824	800	F117SG471(1)100(2)	GPC7.3471(1)100K31(2)
100	63	0.00068	SG/K31	6.0	2.5	7.3	2824	800	F117SG681(1)100(2)	GPC7.3681(1)100K31(2)
100	63	0.0010	SG/K31	6.0	2.5	7.3	2824	800	F117SG102(1)100(2)	GPC7.3102(1)100K31(2)
100	63	0.0015	SG/K31	6.0	2.5	7.3	2824	800	F117SG152(1)100(2)	GPC7.3152(1)100K31(2)
100	63	0.0022	SG/K31	6.0	2.5	7.3	2824	800	F117SG222(1)100(2)	GPC7.3222(1)100K31(2)
100	63	0.0033	SG/K31	6.0	2.5	7.3	2824	800	F117SG332(1)100(2)	GPC7.3332(1)100K31(2)
100	63	0.0047	SG/K31	6.0	2.5	7.3	2824	800	F117SG472(1)100(2)	GPC7.3472(1)100K31(2)
100	63	0.0068	SG/K31	6.0	2.5	7.3	2824	800	F117SG682(1)100(2)	GPC7.3682(1)100K31(2)
100	63	0.010	SG/K31	6.0	2.5	7.3	2824	800	F117SG103(1)100(2)	GPC7.3103(1)100K31(2)
100	63	0.015	SL/K33	6.0	3.0	7.3	2824	800	F117SL153(1)100(2)	GPC7.3153(1)100K33(2)
100	63	0.022	SL/K33	6.0	3.0	7.3	2824	800	F117SL223(1)100(2)	GPC7.3223(1)100K33(2)
100	63	0.033	SP/K35	6.0	3.5	7.3	2824	800	F117SP333(1)100(2)	GPC7.3333(1)100K35(2)
100	63	0.047	ST/K37	6.0	4.5	7.3	2824	800	F117ST473(1)100(2)	GPC7.3473(1)100K37(2)
100	63	0.068	WP/A31	9.1	5.5	10.2	4036	600	F117WP682(1)100(2)	GPC10.2682(1)100A31(2)
100	63	0.10	WP/A31	9.1	5.5	10.2	4036	600	F117WP103(1)100(2)	GPC10.2103(1)100A31(2)
100	63	0.15	WP/A31	9.1	5.5	10.2	4036	600	F117WP153(1)100(2)	GPC10.2153(1)100A31(2)
100	63	0.22	YR/B31	11.5	6.5	12.7	5045	400	F117YR224(1)100(2)	GPC12.7224(1)100B31(2)
100	63	0.33	YR/B31	11.5	6.5	12.7	5045	400	F117YR334(1)100(2)	GPC12.7334(1)100B31(2)
100	63	0.47	ZS/C31	15.0	7.0	16.5	6560	150	F117ZS474(1)100(2)	GPC16.5474(1)100C31(2)
100	63	0.68	ZS/C31	15.0	7.0	16.5	6560	150	F117ZS684(1)100(2)	GPC16.5684(1)100C31(2)
100	63	1.0	ZS/C31	15.0	7.0	16.5	6560	150	F117ZS105(1)100(2)	GPC16.5105(1)100C31(2)
160	100	0.00047	SG/K31	6.0	2.5	7.3	2824	1000	F117SG471(1)160(2)	GPC7.3471(1)160K31(2)
VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number

(1) $K = \pm 10\%$, $M = \pm 20\%$, other tolerances on request

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
160	100	0.00068	SG/K31	6.0	2.5	7.3	2824	1000	F117SG681(1)160(2)	GPC7.3681(1)160K31(2)
160	100	0.0010	SG/K31	6.0	2.5	7.3	2824	1000	F117SG102(1)160(2)	GPC7.3102(1)160K31(2)
160	100	0.0015	SG/K31	6.0	2.5	7.3	2824	1000	F117SG152(1)160(2)	GPC7.3152(1)160K31(2)
160	100	0.0022	SG/K31	6.0	2.5	7.3	2824	1000	F117SG222(1)160(2)	GPC7.3222(1)160K31(2)
160	100	0.0033	SG/K31	6.0	2.5	7.3	2824	1000	F117SG332(1)160(2)	GPC7.3332(1)160K31(2)
160	100	0.0047	SG/K31	6.0	2.5	7.3	2824	1000	F117SG472(1)160(2)	GPC7.3472(1)160K31(2)
160	100	0.0068	SG/K31	6.0	2.5	7.3	2824	1000	F117SG682(1)160(2)	GPC7.3682(1)160K31(2)
160	100	0.010	SL/K33	6.0	3.0	7.3	2824	1000	F117SL103(1)160(2)	GPC7.3103(1)160K33(2)
160	100	0.015	SL/K33	6.0	3.0	7.3	2824	1000	F117SL153(1)160(2)	GPC7.3153(1)160K33(2)
160	100	0.022	SP/K35	6.0	3.5	7.3	2824	1000	F117SP223(1)160(2)	GPC7.3223(1)160K35(2)
160	100	0.033	ST/K37	6.0	4.5	7.3	2824	1000	F117ST333(1)160(2)	GPC7.3333(1)160K37(2)
160	100	0.0068	WP/A31	9.1	5.5	10.2	4036	800	F117WP682(1)160(2)	GPC10.2682(1)160A31(2)
160	100	0.010	WP/A31	9.1	5.5	10.2	4036	800	F117WP103(1)160(2)	GPC10.2103(1)160A31(2)
160	100	0.015	WP/A31	9.1	5.5	10.2	4036	800	F117WP153(1)160(2)	GPC10.2153(1)160A31(2)
160	100	0.022	WP/A31	9.1	5.5	10.2	4036	800	F117WP223(1)160(2)	GPC10.2223(1)160A31(2)
160	100	0.027	WP/A31	9.1	5.5	10.2	4036	800	F117WP273(1)160(2)	GPC10.2273(1)160A31(2)
160	100	0.033	WP/A31	9.1	5.5	10.2	4036	800	F117WP333(1)160(2)	GPC10.2333(1)160A31(2)
160	100	0.047	WP/A31	9.1	5.5	10.2	4036	800	F117WP473(1)160(2)	GPC10.2473(1)160A31(2)
160	100	0.068	WP/A31	9.1	5.5	10.2	4036	800	F117WP683(1)160(2)	GPC10.2683(1)160A31(2)
160	100	0.10	WP/A31	9.1	5.5	10.2	4036	800	F117WP104(1)160(2)	GPC10.2104(1)160A31(2)
160	100	0.15	YR/B31	11.5	6.5	12.7	5045	600	F117YR154(1)160(2)	GPC12.7154(1)160B31(2)
160	100	0.22	YR/B31	11.5	6.5	12.7	5045	600	F117YR224(1)160(2)	GPC12.7224(1)160B31(2)
160	100	0.33	ZS/C31	15.0	7.0	16.5	6560	250	F117ZS334(1)160(2)	GPC16.5334(1)160C31(2)
160	100	0.47	ZS/C31	15.0	7.0	16.5	6560	250	F117ZS474(1)160(2)	GPC16.5474(1)160C31(2)
160	100	0.68	ZS/C31	15.0	7.0	16.5	6560	250	F117ZS684(1)160(2)	GPC16.5684(1)160C31(2)
250	160	0.00047	SG/K31	6.0	2.5	7.3	2824	1200	F117SG471(1)250(2)	GPC7.3471(1)250K31(2)
250	160	0.00068	SG/K31	6.0	2.5	7.3	2824	1200	F117SG681(1)250(2)	GPC7.3681(1)250K31(2)
250	160	0.0010	SG/K31	6.0	2.5	7.3	2824	1200	F117SG102(1)250(2)	GPC7.3102(1)250K31(2)
250	160	0.0015	SG/K31	6.0	2.5	7.3	2824	1200	F117SG152(1)250(2)	GPC7.3152(1)250K31(2)
250	160	0.0022	SG/K31	6.0	2.5	7.3	2824	1200	F117SG222(1)250(2)	GPC7.3222(1)250K31(2)
250	160	0.0033	SG/K31	6.0	2.5	7.3	2824	1200	F117SG332(1)250(2)	GPC7.3332(1)250K31(2)
250	160	0.0047	SG/K31	6.0	2.5	7.3	2824	1200	F117SG472(1)250(2)	GPC7.3472(1)250K31(2)
250	160	0.0068	SL/K33	6.0	3.0	7.3	2824	1200	F117SL682(1)250(2)	GPC7.3682(1)250K33(2)
250	160	0.010	SL/K33	6.0	3.0	7.3	2824	1200	F117SL103(1)250(2)	GPC7.3103(1)250K33(2)
250	160	0.015	WP/A31	9.1	5.5	10.2	4036	1000	F117WP153(1)250(2)	GPC10.2153(1)250A31(2)
250	160	0.022	WP/A31	9.1	5.5	10.2	4036	1000	F117WP223(1)250(2)	GPC10.2223(1)250A31(2)
250	160	0.027	WP/A31	9.1	5.5	10.2	4036	1000	F117WP273(1)250(2)	GPC7.2273(1)250A31(2)
250	160	0.033	WP/A31	9.1	5.5	10.2	4036	1000	F117WP333(1)250(2)	GPC10.2333(1)250A31(2)
250	160	0.047	WP/A31	9.1	5.5	10.2	4036	1000	F117WP473(1)250(2)	GPC10.2473(1)250A31(2)
250	160	0.068	WP/A31	9.1	5.5	10.2	4036	1000	F117WP683(1)250(2)	GPC10.2683(1)250A31(2)
250	160	0.10	YR/B31	11.5	6.5	12.7	5045	700	F117YR104(1)250(2)	GPC12.7104(1)250B31(2)
250	160	0.15	YR/B31	11.5	6.5	12.7	5045	700	F117YR154(1)250(2)	GPC12.7154(1)250B31(2)
250	160	0.22	ZS/C31	15.0	7.0	16.5	6560	350	F117ZS224(1)250(2)	GPC16.5224(1)250C31(2)
250	160	0.33	ZS/C31	15.0	7.0	16.5	6560	350	F117ZS334(1)250(2)	GPC16.5334(1)250C31(2)
250	160	0.47	ZS/C31	15.0	7.0	16.5	6560	350	F117ZS474(1)250(2)	GPC16.5474(1)250C31(2)
400	200	0.00047	SG/K31	6.0	2.5	7.3	2824	1600	F117SG471(1)400(2)	GPC7.3471(1)400K31(2)
400	200	0.00068	SG/K31	6.0	2.5	7.3	2824	1600	F117SG681(1)400(2)	GPC7.3681(1)400K31(2)
400	200	0.0010	SG/K31	6.0	2.5	7.3	2824	1600	F117SG102(1)400(2)	GPC7.3102(1)400K31(2)
400	200	0.0015	SG/K31	6.0	2.5	7.3	2824	1600	F117SG152(1)400(2)	GPC7.3152(1)400K31(2)
400	200	0.0022	SG/K31	6.0	2.5	7.3	2824	1600	F117SG222(1)400(2)	GPC7.3222(1)400K31(2)
400	200	0.0033	SG/K31	6.0	2.5	7.3	2824	1600	F117SG332(1)400(2)	GPC7.3332(1)400K31(2)
400	200	0.0047	SL/K33	6.0	3.0	7.3	2824	1600	F117SL472(1)400(2)	GPC7.3472(1)400K33(2)
400	200	0.0068	SP/K35	6.0	3.5	7.3	2824	1600	F117SP682(1)400(2)	GPC7.3682(1)400K35(2)
400	200	0.010	ST/K37	6.0	4.5	7.3	2824	1600	F117ST103(1)400(2)	GPC7.3103(1)400K37(2)
400	200	0.0068	WP/A31	9.1	5.5	10.2	4036	1300	F117WP682(1)400(2)	GPC10.2682(1)400A31(2)
VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number

(1) $K = \pm 10\%$, $M = \pm 20\%$, other tolerances on request

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

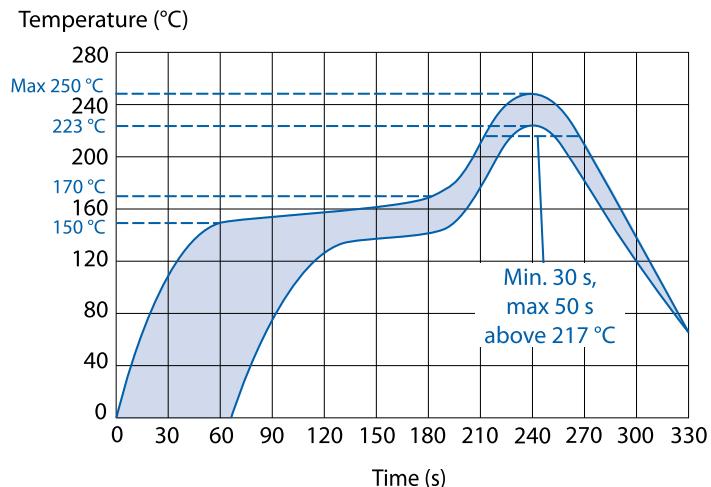
VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
400	200	0.010	WP/A31	9.1	5.5	10.2	4036	1300	F117WP103(1)400(2)	GPC10.2103(1)400A31(2)
400	200	0.015	WP/A31	9.1	5.5	10.2	4036	1300	F117WP153(1)400(2)	GPC10.2153(1)400A31(2)
400	200	0.022	WP/A31	9.1	5.5	10.2	4036	1300	F117WP223(1)400(2)	GPC10.2223(1)400A31(2)
400	200	0.027	WP/A31	9.1	5.5	10.2	4036	1300	F117WP273(1)400(2)	GPC10.2273(1)400A31(2)
400	200	0.033	YR/B31	11.5	6.5	12.7	5045	900	F117YR333(1)400(2)	GPC12.7333(1)400B31(2)
400	200	0.047	YR/B31	11.5	6.5	12.7	5045	900	F117YR473(1)400(2)	GPC12.7473(1)400B31(2)
400	200	0.068	YR/B31	11.5	6.5	12.7	5045	900	F117YR683(1)400(2)	GPC12.7683(1)400B31(2)
400	200	0.10	ZS/C31	15.0	7.0	16.5	6560	450	F117ZS104(1)400(2)	GPC16.5104(1)400C31(2)
400	200	0.15	ZS/C31	15.0	7.0	16.5	6560	450	F117ZS154(1)400(2)	GPC16.5154(1)400C31(2)
400	200	0.22	ZS/C31	15.0	7.0	16.5	6560	450	F117ZS224(1)400(2)	GPC16.5224(1)400C31(2)
630	300	0.00047	SG/K31	6.0	2.5	7.3	2824	2000	F117SG471(1)630(2)	GPC7.3471(1)630K31(2)
630	300	0.00068	SG/K31	6.0	2.5	7.3	2824	2000	F117SG681(1)630(2)	GPC7.3681(1)630K31(2)
630	300	0.0010	SG/K31	6.0	2.5	7.3	2824	2000	F117SG102(1)630(2)	GPC7.3102(1)630K31(2)
630	300	0.0015	SG/K31	6.0	2.5	7.3	2824	2000	F117SG152(1)630(2)	GPC7.3152(1)630K31(2)
630	300	0.0022	SL/K33	6.0	3.0	7.3	2824	2000	F117SL222(1)630(2)	GPC7.3222(1)630K33(2)
630	300	0.0033	SL/K33	6.0	3.0	7.3	2824	2000	F117SL332(1)630(2)	GPC7.3332(1)630K33(2)
630	300	0.0047	SP/K35	6.0	3.5	7.3	2824	2000	F117SP472(1)630(2)	GPC7.3472(1)630K35(2)
630	300	0.0068	ST/K37	6.0	4.5	7.3	2824	2000	F117ST682(1)630(2)	GPC7.3682(1)630K37(2)
630	300	0.0068	WP/A31	9.1	5.5	10.2	4036	1600	F117WP682(1)630(2)	GPC10.2682(1)630A31(2)
630	300	0.010	WP/A31	9.1	5.5	10.2	4036	1600	F117WP103(1)630(2)	GPC10.2103(1)630A31(2)
630	300	0.015	WP/A31	9.1	5.5	10.2	4036	1600	F117WP153(1)630(2)	GPC10.2153(1)630A31(2)
630	300	0.022	WP/A31	9.1	5.5	10.2	4036	1600	F117WP223(1)630(2)	GPC10.2223(1)630A31(2)
630	300	0.033	YR/B31	11.5	6.5	12.7	5045	1100	F117YR333(1)630(2)	GPC12.7333(1)630B31(2)
630	300	0.047	YR/B31	11.5	6.5	12.7	5045	1100	F117YR473(1)630(2)	GPC12.7473(1)630B31(2)
630	300	0.068	ZS/C31	15.0	7.0	16.5	6560	550	F117ZS683(1)630(2)	GPC16.5683(1)630C31(2)
630	300	0.10	ZS/C31	15.0	7.0	16.5	6560	550	F117ZS104(1)630(2)	GPC16.5104(1)630C31(2)
1000	350	0.00047	SG/K31	6.0	2.5	7.3	2824	2200	F117SG471(1)1K0(2)	GPC7.3471(1)1000K31(2)
1000	350	0.00068	SG/K31	6.0	2.5	7.3	2824	2200	F117SG681(1)1K0(2)	GPC7.3681(1)1000K31(2)
1000	350	0.0010	SG/K31	6.0	2.5	7.3	2824	2200	F117SG102(1)1K0(2)	GPC7.3102(1)1000K31(2)
1000	350	0.0015	SL/K33	6.0	3.0	7.3	2824	2200	F117SL152(1)1K0(2)	GPC7.3152(1)1000K33(2)
1000	350	0.0022	SL/K33	6.0	3.0	7.3	2824	2200	F117SL222(1)1K0(2)	GPC7.3222(1)1000K33(2)
1000	350	0.0033	SP/K35	6.0	3.5	7.3	2824	2200	F117SP332(1)1K0(2)	GPC7.3332(1)1000K35(2)
1000	350	0.0047	ST/K37	6.0	4.5	7.3	2824	2200	F117ST472(1)1K0(2)	GPC7.3472(1)1000K37(2)
1000	350	0.0068	WP/A31	9.1	5.5	10.2	4036	1700	F117WP682(1)1K0(2)	GPC10.2682(1)1000A31(2)
1000	350	0.010	WP/A31	9.1	5.5	10.2	4036	1700	F117WP103(1)1K0(2)	GPC10.2103(1)1000A31(2)
1000	350	0.015	WP/A31	9.1	5.5	10.2	4036	1700	F117WP153(1)1K0(2)	GPC10.2153(1)1000A31(2)
1000	350	0.022	YR/B31	11.5	6.5	12.7	5045	1200	F117YR223(1)1K0(2)	GPC12.7223(1)1000B31(2)
1000	350	0.033	YR/B31	11.5	6.5	12.7	5045	1200	F117YR333(1)1K0(2)	GPC12.7333(1)1000B31(2)
1000	350	0.047	ZS/C31	15.0	7.0	16.5	6560	600	F117ZS473(1)1K0(2)	GPC16.5473(1)1000C31(2)
1000	350	0.068	ZS/C31	15.0	7.0	16.5	6560	600	F117ZS683(1)1K0(2)	GPC16.5683(1)1000C31(2)
VDC	VAC	Capacitance Value (μF)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number

(1) $K = \pm 10\%$, $M = \pm 20\%$, other tolerances on request.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 250°C.



Marking

- Capacitance
- Capacitance tolerance code
- Rated voltage code
- Capacitor type P for GPC
- Manufacturing date code

Packaging Quantities

Chip Size (EIA)	Base (mm)	Height (mm)	Length (mm)	Bulk	Reel Horizontal Orientation	Reel Vertical Orientation
2220	5	2.5	5.7	2000	3100	
2220	5	3	5.7	2000	2400	
2220	5	4	5.7	2000	2100	
2824	6	2.5	7.3	2000	3100	
2824	6	3	7.3	2000	2500	
2824	6	3.5	7.3	2000	2300	
2824	6	4.5	7.3	1000	1700	
4036	9.1	5.5	10.2	1000	800	500
5045	11.5	6.5	12.7	1000	600	400
6560	15	7	16.5	800	500	200

Not for new design. Use LDE Series.

General Purpose, High Stability and AC Line EMI Suppression

GMW Series Unencapsulated Winding, Size 2220, 63 – 630 VDC

The Capacitance Company



Overview

Polyethylene naphthalate (PEN) film capacitor for surface mounting.

Applications

Typical applications include bypassing and signal coupling. GMW is a general purpose series designed for the highest reliability and high temperature service.

Benefits

- Rated voltage: 63 – 630 VDC
- Rated voltage: 40 – 220 VAC
- Capacitance range: 0.001 – 0.47 μ F
- EIA size: 2220
- Capacitance tolerance: $\pm 10\%$, $\pm 20\%$, $\pm 5\%$ on request
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



Legacy Part Number System

GMW	5.7	102	K	63	J91	TR12
Series	Chip Length (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Packaging Code
Metallized PEN	5.7	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	K = $\pm 10\%$ M = $\pm 20\%$ J = $\pm 5\%$ on request	63 100 250 400 630	See Dimension Table	See Ordering Options Table

New KEMET Part Number System

F	116	P	H	102	K	063	V
Capacitor Class	Series	Chip Size	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film	Metallized PEN	P = 2220	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	J = $\pm 5\%$ K = $\pm 10\%$ Other tolerances on request	063 = 63 100 = 100 250 = 250 400 = 400 630 = 630	See Ordering Options Table

One world. One KEMET

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Film Surface Mount Capacitors – General Purpose, High Stability and AC Line EMI Suppression

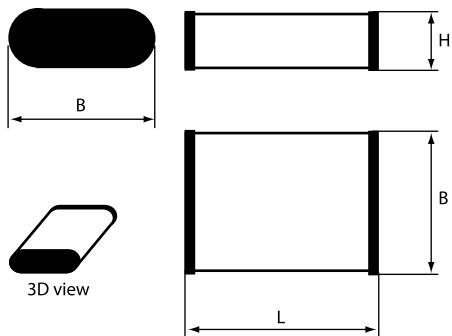
GMW Series Unencapsulated Winding, Size 2220, 63 – 630 VDC

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Ordering Options Table

Packaging Type	KEMET Packaging Code	Legacy Packaging Code
Standard Packaging Options		
Tape & Reel (Standard Reel)	V	TR12
Bulk (Bag)	A	BULK

Dimensions – Millimeters



KEMET Size Code	Legacy Size Code	Chip Size (EIA)	B		H		L	
			Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
PH	J91	2220	5.0	+/-0.4	2.0	Maximum	5.7	+/-0.4
PP	J93	2220	5.0	+/-0.4	3.0	Maximum	5.7	+/-0.4
PU	J95	2220	5.0	+/-0.4	4.0	Maximum	5.7	+/-0.4

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.



RoHS Compliant

Not for new design. Use LDE Series.

Film Surface Mount Capacitors – General Purpose, High Stability and AC Line EMI Suppression

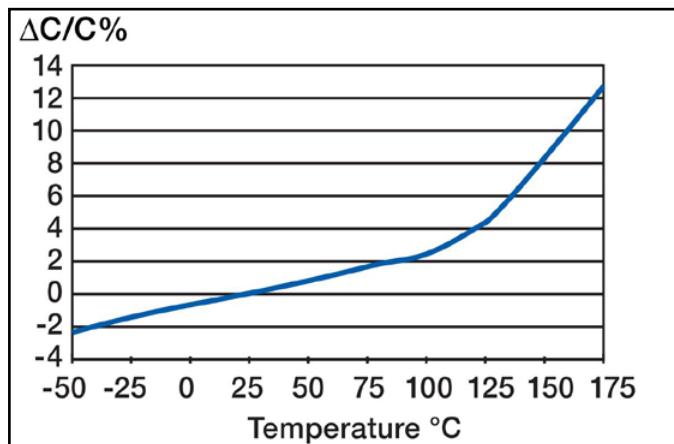
GMW Series Unencapsulated Winding, Size 2220, 63 – 630 VDC

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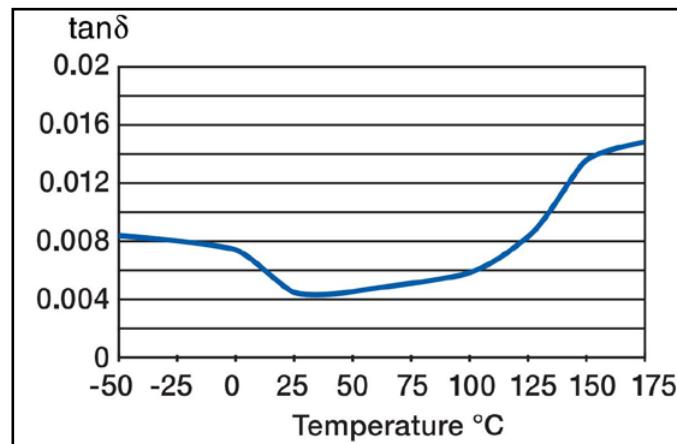
Performance Characteristics

Rated Voltage (VDC)	63	100	250	400	630
Rated Voltage (VAC)	40	63	160	200	220
Capacitance Range (μ F)	0.001 – 0.47	0.001 – 0.22	0.001 – 0.068	0.001 – 0.015	0.001 – 0.0068
Chip Size (EIA)	2220				
Capacitance Tolerance	$\pm 10\%$, $\pm 20\%$, $\pm 5\%$ on request				
Category Temperature Range	-55°C to +125°C				
Rated Temperature	+100°C				
Voltage Derating	The rated voltage should be decreased with 1.25%/°C from +100°C to +125°C and 1.5%/°C from +125°C to 175°C				
Climatic Category	55/125/56				
Test Voltage	1.6 x V_R , 60 seconds				
Insulation Resistance	Measured at +20°C According to IEC 60384-19				
	Minimum Value Between Terminals				
			$C \leq 0.47 \mu F$		
	$V_R \leq 100$		10,000 M Ω		
	$V_R > 100$		30,000 M Ω		
Dissipation Factor	Maximum Values at +23°C				
			$C \leq 0.1 \mu F$	$0.1 < C \leq 0.47 \mu F$	
	1 kHz		0.6%	0.6%	
	10 kHz		1.0%	1.0%	
	100 kHz		2.0%	2.5%	
Pulse Rise Time	The capacitors can withstand an unlimited number of pulses with a dV/dt according to Table 1. For voltages (V) lower than the rated voltage (V_R), the specified dV/dt can be multiplied by V_R/V .				

Capacitance vs. Temperature



Dissipation Factor vs. Temperature



Not for new design. Use LDE Series.

Film Surface Mount Capacitors – General Purpose, High Stability and AC Line EMI Suppression

GMW Series Unencapsulated Winding, Size 2220, 63 – 630 VDC

The Capacitance Company
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Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
63	40	0.0010	PH/J91	5.0	2.0	5.7	2220	50	F116PH102(1)063(2)	GMW5.7102(1)63J91(2)
63	40	0.0012	PH/J91	5.0	2.0	5.7	2220	50	F116PH122(1)063(2)	GMW5.7122(1)63J91(2)
63	40	0.0015	PH/J91	5.0	2.0	5.7	2220	50	F116PH152(1)063(2)	GMW5.7152(1)63J91(2)
63	40	0.0018	PH/J91	5.0	2.0	5.7	2220	50	F116PH182(1)063(2)	GMW5.7182(1)63J91(2)
63	40	0.0022	PH/J91	5.0	2.0	5.7	2220	50	F116PH222(1)063(2)	GMW5.7222(1)63J91(2)
63	40	0.0027	PH/J91	5.0	2.0	5.7	2220	50	F116PH272(1)063(2)	GMW5.7272(1)63J91(2)
63	40	0.0033	PH/J91	5.0	2.0	5.7	2220	50	F116PH332(1)063(2)	GMW5.7332(1)63J91(2)
63	40	0.0039	PH/J91	5.0	2.0	5.7	2220	50	F116PH392(1)063(2)	GMW5.7392(1)63J91(2)
63	40	0.0047	PH/J91	5.0	2.0	5.7	2220	50	F116PH472(1)063(2)	GMW5.7472(1)63J91(2)
63	40	0.0056	PH/J91	5.0	2.0	5.7	2220	50	F116PH562(1)063(2)	GMW5.7562(1)63J91(2)
63	40	0.0068	PH/J91	5.0	2.0	5.7	2220	50	F116PH682(1)063(2)	GMW5.7682(1)63J91(2)
63	40	0.0082	PH/J91	5.0	2.0	5.7	2220	40	F116PH822(1)063(2)	GMW5.7822(1)63J91(2)
63	40	0.010	PH/J91	5.0	2.0	5.7	2220	40	F116PH103(1)063(2)	GMW5.7103(1)63J91(2)
63	40	0.012	PH/J91	5.0	2.0	5.7	2220	40	F116PH123(1)063(2)	GMW5.7123(1)63J91(2)
63	40	0.015	PH/J91	5.0	2.0	5.7	2220	40	F116PH153(1)063(2)	GMW5.7153(1)63J91(2)
63	40	0.018	PH/J91	5.0	2.0	5.7	2220	40	F116PH183(1)063(2)	GMW5.7183(1)63J91(2)
63	40	0.022	PH/J91	5.0	2.0	5.7	2220	40	F116PH223(1)063(2)	GMW5.7223(1)63J91(2)
63	40	0.027	PH/J91	5.0	2.0	5.7	2220	40	F116PH273(1)063(2)	GMW5.7273(1)63J91(2)
63	40	0.033	PH/J91	5.0	2.0	5.7	2220	40	F116PH333(1)063(2)	GMW5.7333(1)63J91(2)
63	40	0.039	PH/J91	5.0	2.0	5.7	2220	30	F116PH393(1)063(2)	GMW5.7393(1)63J91(2)
63	40	0.047	PH/J91	5.0	2.0	5.7	2220	30	F116PH473(1)063(2)	GMW5.7473(1)63J91(2)
63	40	0.056	PH/J91	5.0	2.0	5.7	2220	30	F116PH563(1)063(2)	GMW5.7563(1)63J91(2)
63	40	0.068	PH/J91	5.0	2.0	5.7	2220	30	F116PH683(1)063(2)	GMW5.7683(1)63J91(2)
63	40	0.082	PH/J91	5.0	2.0	5.7	2220	30	F116PH823(1)063(2)	GMW5.7823(1)63J91(2)
63	40	0.10	PH/J91	5.0	2.0	5.7	2220	30	F116PH104(1)063(2)	GMW5.7104(1)63J91(2)
63	40	0.12	PH/J91	5.0	2.0	5.7	2220	20	F116PH124(1)063(2)	GMW5.7124(1)63J91(2)
63	40	0.15	PH/J91	5.0	2.0	5.7	2220	20	F116PH154(1)063(2)	GMW5.7154(1)63J91(2)
63	40	0.18	PH/J91	5.0	2.0	5.7	2220	20	F116PH184(1)063(2)	GMW5.7184(1)63J91(2)
63	40	0.22	PH/J91	5.0	2.0	5.7	2220	20	F116PH224(1)063(2)	GMW5.7224(1)63J91(2)
63	40	0.27	PH/J91	5.0	2.0	5.7	2220	20	F116PH274(1)063(2)	GMW5.7274(1)63J91(2)
63	40	0.33	PP/J93	5.0	3.0	5.7	2220	20	F116PP334(1)063(2)	GMW5.7334(1)63J93(2)
63	40	0.39	PP/J93	5.0	3.0	5.7	2220	20	F116PP394(1)063(2)	GMW5.7394(1)63J93(2)
63	40	0.47	PU/J95	5.0	4.0	5.7	2220	20	F116PU474(1)063(2)	GMW5.7474(1)63J95(2)
100	63	0.0010	PH/J91	5.0	2.0	5.7	2220	50	F116PH102(1)100(2)	GMW5.7102(1)100J91(2)
100	63	0.0012	PH/J91	5.0	2.0	5.7	2220	50	F116PH122(1)100(2)	GMW5.7122(1)100J91(2)
100	63	0.0015	PH/J91	5.0	2.0	5.7	2220	50	F116PH152(1)100(2)	GMW5.7152(1)100J91(2)
100	63	0.0018	PH/J91	5.0	2.0	5.7	2220	50	F116PH182(1)100(2)	GMW5.7182(1)100J91(2)
100	63	0.0022	PH/J91	5.0	2.0	5.7	2220	50	F116PH222(1)100(2)	GMW5.7222(1)100J91(2)
100	63	0.0027	PH/J91	5.0	2.0	5.7	2220	50	F116PH272(1)100(2)	GMW5.7272(1)100J91(2)
100	63	0.0033	PH/J91	5.0	2.0	5.7	2220	50	F116PH332(1)100(2)	GMW5.7332(1)100J91(2)
100	63	0.0039	PH/J91	5.0	2.0	5.7	2220	50	F116PH392(1)100(2)	GMW5.7392(1)100J91(2)
100	63	0.0047	PH/J91	5.0	2.0	5.7	2220	50	F116PH472(1)100(2)	GMW5.7472(1)100J91(2)
100	63	0.0056	PH/J91	5.0	2.0	5.7	2220	50	F116PH562(1)100(2)	GMW5.7562(1)100J91(2)
100	63	0.0068	PH/J91	5.0	2.0	5.7	2220	50	F116PH682(1)100(2)	GMW5.7682(1)100J91(2)
100	63	0.0082	PH/J91	5.0	2.0	5.7	2220	40	F116PH822(1)100(2)	GMW5.7822(1)100J91(2)
100	63	0.010	PH/J91	5.0	2.0	5.7	2220	40	F116PH103(1)100(2)	GMW5.7103(1)100J91(2)
100	63	0.012	PH/J91	5.0	2.0	5.7	2220	40	F116PH123(1)100(2)	GMW5.7123(1)100J91(2)
100	63	0.015	PH/J91	5.0	2.0	5.7	2220	40	F116PH153(1)100(2)	GMW5.7153(1)100J91(2)
100	63	0.018	PH/J91	5.0	2.0	5.7	2220	40	F116PH183(1)100(2)	GMW5.7183(1)100J91(2)
100	63	0.022	PH/J91	5.0	2.0	5.7	2220	40	F116PH223(1)100(2)	GMW5.7223(1)100J91(2)
100	63	0.027	PH/J91	5.0	2.0	5.7	2220	40	F116PH273(1)100(2)	GMW5.7273(1)100J91(2)
100	63	0.033	PH/J91	5.0	2.0	5.7	2220	40	F116PH333(1)100(2)	GMW5.7333(1)100J91(2)
100	63	0.039	PH/J91	5.0	2.0	5.7	2220	30	F116PH393(1)100(2)	GMW5.7393(1)100J91(2)
100	63	0.047	PH/J91	5.0	2.0	5.7	2220	30	F116PH473(1)100(2)	GMW5.7473(1)100J91(2)
100	63	0.056	PH/J91	5.0	2.0	5.7	2220	30	F116PH563(1)100(2)	GMW5.7563(1)100J91(2)
100	63	0.068	PH/J91	5.0	2.0	5.7	2220	30	F116PH683(1)100(2)	GMW5.7683(1)100J91(2)
100	63	0.082	PH/J91	5.0	2.0	5.7	2220	30	F116PH823(1)100(2)	GMW5.7823(1)100J91(2)
100	63	0.10	PH/J91	5.0	2.0	5.7	2220	30	F116PH104(1)100(2)	GMW5.7104(1)100J91(2)
100	63	0.12	PP/J93	5.0	3.0	5.7	2220	30	F116PP124(1)100(2)	GMW5.7124(1)100J93(2)

(1) $K = \pm 10\%$, $M = \pm 20\%$, $J = \pm 5\%$ on request

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Not for new design. Use LDE Series.

Film Surface Mount Capacitors – General Purpose, High Stability and AC Line EMI Suppression

GMW Series Unencapsulated Winding, Size 2220, 63 – 630 VDC

The Capacitance Company
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Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
100	63	0.15	PP/J93	5.0	3.0	5.7	2220	30	F116PP154(1)100(2)	GMW5.7154(1)100J93(2)
100	63	0.18	PU/J95	5.0	4.0	5.7	2220	30	F116PU184(1)100(2)	GMW5.7184(1)100J95(2)
100	63	0.22	PU/J95	5.0	4.0	5.7	2220	30	F116PU224(1)100(2)	GMW5.7224(1)100J95(2)
250	160	0.0010	PH/J91	5.0	2.0	5.7	2220	50	F116PH102(1)250(2)	GMW5.7102(1)250J91(2)
250	160	0.0012	PH/J91	5.0	2.0	5.7	2220	50	F116PH122(1)250(2)	GMW5.7122(1)250J91(2)
250	160	0.0015	PH/J91	5.0	2.0	5.7	2220	50	F116PH152(1)250(2)	GMW5.7152(1)250J91(2)
250	160	0.0018	PH/J91	5.0	2.0	5.7	2220	50	F116PH182(1)250(2)	GMW5.7182(1)250J91(2)
250	160	0.0022	PH/J91	5.0	2.0	5.7	2220	50	F116PH222(1)250(2)	GMW5.7222(1)250J91(2)
250	160	0.0027	PH/J91	5.0	2.0	5.7	2220	50	F116PH272(1)250(2)	GMW5.7272(1)250J91(2)
250	160	0.0033	PH/J91	5.0	2.0	5.7	2220	50	F116PH332(1)250(2)	GMW5.7332(1)250J91(2)
250	160	0.0039	PH/J91	5.0	2.0	5.7	2220	50	F116PH392(1)250(2)	GMW5.7392(1)250J91(2)
250	160	0.0047	PH/J91	5.0	2.0	5.7	2220	50	F116PH472(1)250(2)	GMW5.7472(1)250J91(2)
250	160	0.0056	PH/J91	5.0	2.0	5.7	2220	50	F116PH562(1)250(2)	GMW5.7562(1)250J91(2)
250	160	0.0068	PH/J91	5.0	2.0	5.7	2220	50	F116PH682(1)250(2)	GMW5.7682(1)250J91(2)
250	160	0.0082	PH/J91	5.0	2.0	5.7	2220	40	F116PH822(1)250(2)	GMW5.7822(1)250J91(2)
250	160	0.010	PH/J91	5.0	2.0	5.7	2220	40	F116PH103(1)250(2)	GMW5.7103(1)250J91(2)
250	160	0.012	PH/J91	5.0	2.0	5.7	2220	40	F116PH123(1)250(2)	GMW5.7123(1)250J91(2)
250	160	0.015	PH/J91	5.0	2.0	5.7	2220	40	F116PH153(1)250(2)	GMW5.7153(1)250J91(2)
250	160	0.018	PH/J91	5.0	2.0	5.7	2220	40	F116PH183(1)250(2)	GMW5.7183(1)250J91(2)
250	160	0.022	PH/J91	5.0	2.0	5.7	2220	40	F116PH223(1)250(2)	GMW5.7223(1)250J91(2)
250	160	0.027	PH/J91	5.0	2.0	5.7	2220	40	F116PH273(1)250(2)	GMW5.7273(1)250J91(2)
250	160	0.033	PH/J91	5.0	2.0	5.7	2220	40	F116PH333(1)250(2)	GMW5.7333(1)250J91(2)
250	160	0.039	PP/J93	5.0	3.0	5.7	2220	40	F116PP393(1)250(2)	GMW5.7393(1)250J93(2)
250	160	0.047	PP/J93	5.0	3.0	5.7	2220	40	F116PP473(1)250(2)	GMW5.7473(1)250J93(2)
250	160	0.056	PP/J93	5.0	3.0	5.7	2220	40	F116PP563(1)250(2)	GMW5.7563(1)250J93(2)
250	160	0.068	PU/J95	5.0	4.0	5.7	2220	40	F116PU683(1)250(2)	GMW5.7683(1)250J95(2)
400	200	0.0010	PH/J91	5.0	2.0	5.7	2220	50	F116PH102(1)400(2)	GMW5.7102(1)400J91(2)
400	200	0.0012	PH/J91	5.0	2.0	5.7	2220	50	F116PH122(1)400(2)	GMW5.7122(1)400J91(2)
400	200	0.0015	PH/J91	5.0	2.0	5.7	2220	50	F116PH152(1)400(2)	GMW5.7152(1)400J91(2)
400	200	0.0018	PH/J91	5.0	2.0	5.7	2220	50	F116PH182(1)400(2)	GMW5.7182(1)400J91(2)
400	200	0.0022	PH/J91	5.0	2.0	5.7	2220	50	F116PH222(1)400(2)	GMW5.7222(1)400J91(2)
400	200	0.0027	PH/J91	5.0	2.0	5.7	2220	50	F116PH272(1)400(2)	GMW5.7272(1)400J91(2)
400	200	0.0033	PH/J91	5.0	2.0	5.7	2220	50	F116PH332(1)400(2)	GMW5.7332(1)400J91(2)
400	200	0.0039	PH/J91	5.0	2.0	5.7	2220	50	F116PH392(1)400(2)	GMW5.7392(1)400J91(2)
400	200	0.0047	PH/J91	5.0	2.0	5.7	2220	50	F116PH472(1)400(2)	GMW5.7472(1)400J91(2)
400	200	0.0056	PH/J91	5.0	2.0	5.7	2220	50	F116PH562(1)400(2)	GMW5.7562(1)400J91(2)
400	200	0.0068	PH/J91	5.0	2.0	5.7	2220	50	F116PH682(1)400(2)	GMW5.7682(1)400J91(2)
400	200	0.0082	PP/J93	5.0	3.0	5.7	2220	50	F116PP822(1)400(2)	GMW5.7822(1)400J93(2)
400	200	0.010	PP/J93	5.0	3.0	5.7	2220	50	F116PP103(1)400(2)	GMW5.7103(1)400J93(2)
400	200	0.012	PP/J93	5.0	3.0	5.7	2220	50	F116PP123(1)400(2)	GMW5.7123(1)400J93(2)
400	200	0.015	PU/J95	5.0	4.0	5.7	2220	50	F116PU153(1)400(2)	GMW5.7153(1)400J95(2)
630	220	0.0010	PH/J91	5.0	2.0	5.7	2220	50	F116PH102(1)630(2)	GMW5.7102(1)630J91(2)
630	220	0.0012	PH/J91	5.0	2.0	5.7	2220	50	F116PH122(1)630(2)	GMW5.7122(1)630J91(2)
630	220	0.0015	PH/J91	5.0	2.0	5.7	2220	50	F116PH152(1)630(2)	GMW5.7152(1)630J91(2)
630	220	0.0018	PH/J91	5.0	2.0	5.7	2220	50	F116PH182(1)630(2)	GMW5.7182(1)630J91(2)
630	220	0.0022	PH/J91	5.0	2.0	5.7	2220	50	F116PH222(1)630(2)	GMW5.7222(1)630J91(2)
630	220	0.0027	PH/J91	5.0	2.0	5.7	2220	50	F116PH272(1)630(2)	GMW5.7272(1)630J91(2)
630	220	0.0033	PP/J93	5.0	3.0	5.7	2220	50	F116PP332(1)630(2)	GMW5.7332(1)630J93(2)
630	220	0.0039	PP/J93	5.0	3.0	5.7	2220	50	F116PP392(1)630(2)	GMW5.7392(1)630J93(2)
630	220	0.0047	PU/J95	5.0	4.0	5.7	2220	50	F116PU472(1)630(2)	GMW5.7472(1)630J95(2)
630	220	0.0056	PU/J95	5.0	4.0	5.7	2220	50	F116PU562(1)630(2)	GMW5.7562(1)630J95(2)
630	220	0.0068	PU/J95	5.0	4.0	5.7	2220	50	F116PU682(1)630(2)	GMW5.7682(1)630J95(2)

(1) $K = \pm 10\%$, $M = \pm 20\%$, $J = \pm 5\%$ on request

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Not for new design. Use LDE Series.

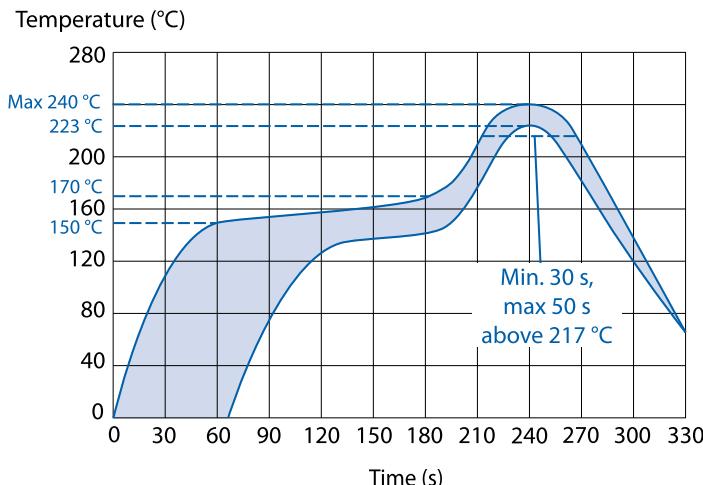
Film Surface Mount Capacitors – General Purpose, High Stability and AC Line EMI Suppression

GMW Series Unencapsulated Winding, Size 2220, 63 – 630 VDC

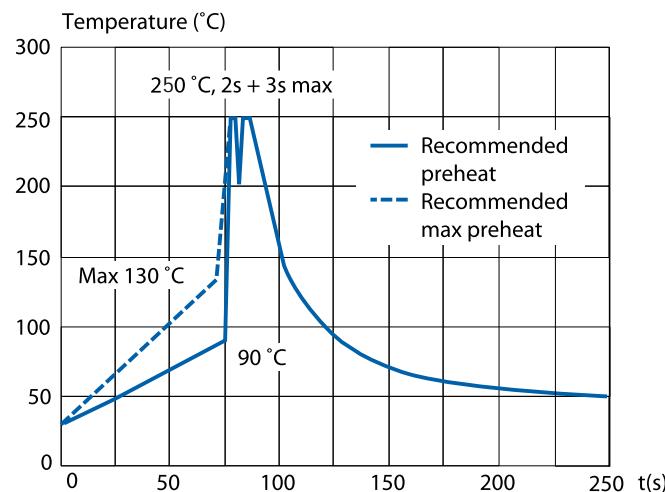
The Capacitance Company
KEMET
CHARGED.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 240°C.



Wave soldering: The recommended preheating temperature is 90°C (130°C maximum). The peak temperature 250°C may be applied for 2 – 5 seconds maximum. KEMET recommends wave soldering for parts with up to 2 mm height.



Marking

- Capacitance
- Capacitance tolerance code
- Rated voltage code
- Capacitor type G for GMW
- Manufacturing date code

Not for new design. Use LDE Series.

Film Surface Mount Capacitors – General Purpose, High Stability and AC Line EMI Suppression

GMW Series Unencapsulated Winding, Size 2220, 63 – 630 VDC

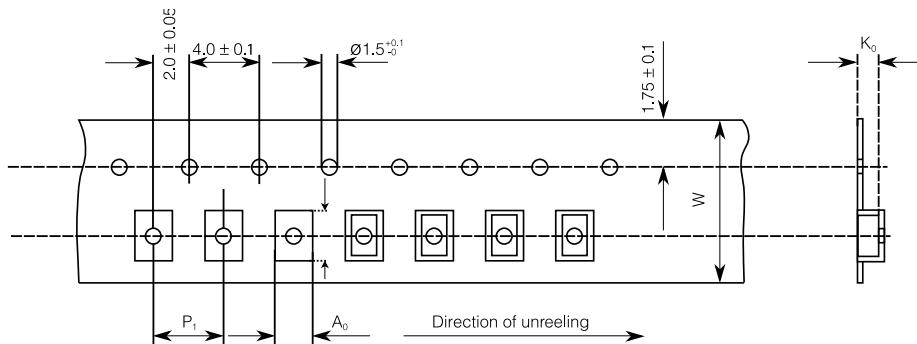
The Capacitance Company
KEMET
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Packaging Quantities

Chip Size (EIA)	Base (mm)	Height (mm)	Length (mm)	Bulk	Reel Horizontal Orientation
2220	5.0	2.0	5.7	2000	3100
2220	5.0	3.0	5.7	2000	2400
2220	5.0	4.0	5.7	2000	2100

Carrier Taping & Packaging (IEC 60286-2)

Horizontal Taping Orientation



Chip Size (EIA) Horizontal Mounting	Dimensions in mm			Taping Specification							
	B	H	L	W	P ₁	A ₀	B ₀	K ₀	D	W ₁	W ₂
	Nominal	Nominal	Nominal	-0/+0.3	+/-0.1	Nominal	Nominal	Nominal	-/+2.0	-0/+2	Maximum
2220	5.0	2.0	5.7	12.0	8.0	5.5	6.0	2.8	330	12.4	22.0
2220	5.0	3.0	5.7	12.0	8.0	5.5	6.0	3.3	330	12.4	22.0
2220	5.0	4.0	5.7	12.0	8.0	5.5	6.0	4.3	330	12.4	22.0

LDB Series Unencapsulated Winding, Size 1206 – 1812, 16 & 50 VDC

Overview

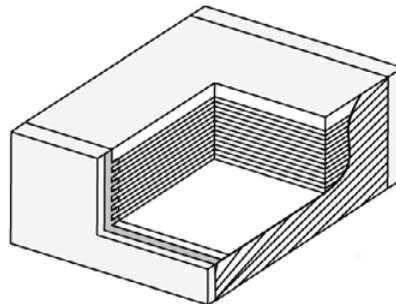
Polyphenylene sulphide (PPS) film capacitor for surface mounting.

Applications

Typical applications include timing, filtering and use as a memory capacitor. The LDB Series is designed for high stability, accuracy and temperature.

Benefits

- Rated voltage: 16 & 50 VDC
- Capacitance range: 0.0033 – 0.1 μ F
- EIA size: 1206 – 1812
- Capacitance tolerance: $\pm 2\%$, $\pm 5\%$
- Climatic category: 55/125/56
- RoHS Complaint and lead-free terminations
- Operating temperature range of -55°C to +125°C



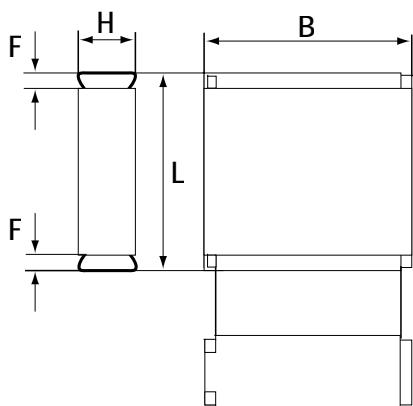
Part Number System

LDB	A	A	2120	G	C5	N	0
Series	Rated Voltage (VDC)	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Version	Packaging Code	Internal Use
Metallized PPS	A = 16 C = 50	See Dimension Table	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	G = $\pm 2\%$ J = $\pm 5\%$	C5 = Standard	See Ordering Options Table	0 (Standard)

Ordering Options Table

Packaging Type	Packaging Code
Standard Packaging Options	
Tape & Reel (Standard Reel)	N

Dimensions – Millimeters



Size Code	Chip Size (EIA)	B		H	L	
		Nominal	Tolerance		Nominal	Tolerance
A	1206	1.7	+/-0.2	See Part Number Table	3.3	+0.3/-0.1
B	1210	2.5	+/-0.3		3.3	+0.3/-0.1
C	1812	3.3	+/-0.3		4.7	+0.3/-0.2

Performance Characteristics

Rated Voltage (VDC)	16	50
Capacitance Range (μ F)	0.012 – 0.1	0.0033 – 0.1
Chip Size (EIA)	1206 – 1812	
Capacitance Values	E12 series	
Capacitance Tolerance	$\pm 2\%$, $\pm 5\%$	
Category Temperature Range	-55°C to +125°C	
Rated Temperature	+105°C	
Voltage Derating	The rated voltage is decreased with 1.25%/°C from +105°C to +125°C	
Climatic Category	55/125/56	
Insulation Resistance	Measured at +25°C $\pm 5^\circ\text{C}$	
	Minimum Value Between Terminals	
	3,000 M Ω	
Dissipation Factor	Maximum Values at 25°C $\pm 5^\circ\text{C}$	
	1 kHz	0.6%
Surge Voltage Test	1.75 \times V _R (5 seconds; T = 25 \pm 5°C)	

Environmental Test Data

Damp Heat, Steady State	
Test Conditions	
Temperature	+40°C ±2°C
Relative Humidity (RH)	93% ±2%
Test Duration	56 days
Performance	
Capacitance Change Δ C/C	≤ 5%
DF Change (Δtgδ)	≤ 30 x 10⁻⁴ at 1 kHz
Insulation Resistance	≥ 50% of limit value
Endurance	
Test Conditions	
Temperature	125°C ±2°C
Test Duration	2,000 hours
Voltage Applied	1.25 x V _c
Performance	
Capacitance Change Δ C/C	≤ 3%
DF Change (Δtgδ)	≤ 30 x 10⁻⁴ at 1 kHz
Insulation Resistance	≥ 50% of limit value
Rapid Change of Temperature	
Test Conditions	
Temperature	1 hour at -55°C, 1 hour at +125°C
Number of Cycles	1,000
Performance	
Capacitance Change Δ C/C	≤ 5%
DF Change (Δtgδ)	≤ 50 x 10⁻⁴ at 1 kHz
Insulation Resistance	≥ limit value
No Mechanical Damage	

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.



RoHS Compliant

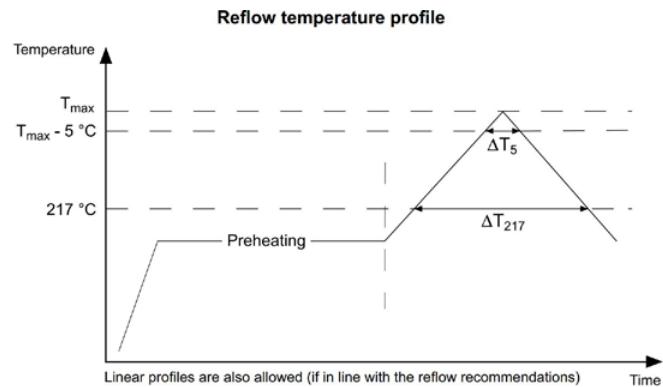
Table 1 – Ratings & Part Number Reference

VDC	Capacitance Value (μF)	Size Code	Dimensions in mm			Chip Size	New KEMET Part Number	Legacy Part Number
			B	H	L			
16	0.012	A	1.7	1.1	3.3	1206	DBAA2120(1)C5N0	LDBAA2120(1)C5N0
16	0.015	A	1.7	1.1	3.3	1206	DBAA2150(1)C5N0	LDBAA2150(1)C5N0
16	0.018	A	1.7	1.1	3.3	1206	DBAA2180(1)C5N0	LDBAA2180(1)C5N0
16	0.022	A	1.7	1.1	3.3	1206	DBAA2220(1)C5N0	LDBAA2220(1)C5N0
16	0.027	A	1.7	1.1	3.3	1206	DBAA2270(1)C5N0	LDBAA2270(1)C5N0
16	0.033	A	1.7	1.1	3.3	1206	DBAA2330(1)C5N0	LDBAA2330(1)C5N0
16	0.039	A	1.7	1.2	3.3	1206	DBAA2390(1)C5N0	LDBAA2390(1)C5N0
16	0.047	A	1.7	1.3	3.3	1206	DBAA2470(1)C5N0	LDBAA2470(1)C5N0
16	0.056	B	2.5	1.7	3.3	1210	DBAB2560(1)C5N0	LDBAB2560(1)C5N0
16	0.068	B	2.5	1.7	3.3	1210	DBAB2680(1)C5N0	LDBAB2680(1)C5N0
16	0.082	B	2.5	1.7	3.3	1210	DBAB2824(1)C5N0	LDBAB2824(1)C5N0
16	0.10	B	2.5	2.0	3.3	1210	DBAB3100(1)C5N0	LDBAB3100(1)C5N0
50	0.0033	A	1.7	1.1	3.3	1206	DBCA1330(1)C5N0	LDBCA1330(1)C5N0
50	0.0039	A	1.7	1.1	3.3	1206	DBCA1390(1)C5N0	LDBCA1390(1)C5N0
50	0.0047	A	1.7	1.1	3.3	1206	DBCA1470(1)C5N0	LDBCA1470(1)C5N0
50	0.0056	A	1.7	1.1	3.3	1206	DBCA1560(1)C5N0	LDBCA1560(1)C5N0
50	0.0068	A	1.7	1.1	3.3	1206	DBCA1680(1)C5N0	LDBCA1680(1)C5N0
50	0.0082	A	1.7	1.1	3.3	1206	DBCA1820(1)C5N0	LDBCA1820(1)C5N0
50	0.010	A	1.7	1.1	3.3	1206	DBCA2100(1)C5N0	LDBCA2100(1)C5N0
50	0.012	A	1.7	1.1	3.3	1206	DBCA2120(1)C5N0	LDBCA2120(1)C5N0
50	0.015	B	2.5	1.4	3.3	1210	DBCB2150(1)C5N0	LDBCB2150(1)C5N0
50	0.018	B	2.5	1.5	3.3	1210	DBCB2180(1)C5N0	LDBCB2180(1)C5N0
50	0.022	B	2.5	1.5	3.3	1210	DBCB2220(1)C5N0	LDBCB2220(1)C5N0
50	0.027	B	2.5	1.5	3.3	1210	DBCB2270(1)C5N0	LDBCB2270(1)C5N0
50	0.033	B	2.5	1.7	3.3	1210	DBCB2330(1)C5N0	LDBCB2330(1)C5N0
50	0.039	B	2.5	1.9	3.3	1210	DBCB2390(1)C5N0	LDBCB2390(1)C5N0
50	0.047	B	2.5	2.3	3.3	1210	DBCB2470(1)C5N0	LDBCB2470(1)C5N0
50	0.056	C	3.3	1.7	4.7	1812	DBCC2560(1)C5N0	LDBCC2560(1)C5N0
50	0.068	C	3.3	1.7	4.7	1812	DBCC2680(1)C5N0	LDBCC2680(1)C5N0
50	0.082	C	3.3	1.7	4.7	1812	DBCC2824(1)C5N0	LDBCC2824(1)C5N0
50	0.10	C	3.3	2.0	4.7	1812	DBCC3100(1)C5N0	LDBCC3100(1)C5N0
VDC	Capacitance Value (μF)	Size Code	B (mm)	H (mm)	L (mm)	Chip Size	New KEMET Part Number	Legacy Part Number

(1) $G = \pm 2\%$, $J = \pm 5\%$.

Soldering Process

Reflow Recommendations	
Preheating	
Maximum Preheating Time	180 seconds
Minimum Temperature	150°C
Maximum Temperature	200°C
Maximum Time within T_{max} and $T_{max} - 5^{\circ}\text{C}$ (ΔT_5)	30 seconds ($T_{max} \leq 250^{\circ}\text{C}$) 10 seconds ($250^{\circ}\text{C} < T_{max} \leq 260^{\circ}\text{C}$)
Maximum Time Over 217°C (ΔT_{217})	150 seconds
Maximum Temperature Ramp Rate	3°C/seconds (heating) 6°C/seconds (cooling)
Second reflow	
If two reflow processes are needed, be sure that before the second reflow, the temperature on the capacitor's surface is lower than 50°C.	



Maximum Temperature on Component Body (T_{max})

Capacitor	Capacitor Volume (mm ³)		
H_{max} (mm)	< 350	350 – 2,000	> 2,000
< 1.6	255°C *	255°C *	255°C *
1.6 – 2.5	255°C *	250°C	245°C
> 2.5	250°C	245°C	245°C

*In line with JEDEC STD 020D ed. June 2007 with some limitations.

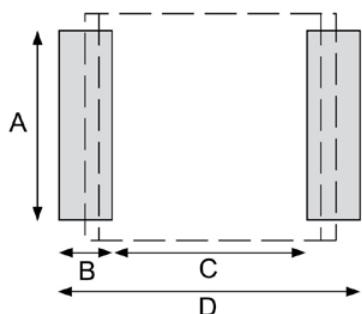
Marking

- KEMET
- Capacitance
- Rated voltage

Packaging Quantities

Chip Size (EIA)	Height (mm)	Reel
1206	1.1	3000
1206	1.2	3000
1210	1.5	2250
1210	1.6	2250
1210	1.7	2250
1210	1.8	2250
1210	2.0	2250
1210	2.1	2250
1812	1.7	4000
1812	1.8	4000
1812	2.2	3000
1812	2.5	3000
1812	2.6	3000

Landing



Size	Dimensions in mm			
	A	B	C	D
1206	1.5	1.1	2.3	4.5
1210	2.3	1.1	2.3	4.5
1812	3	1.7	3.1	6.5

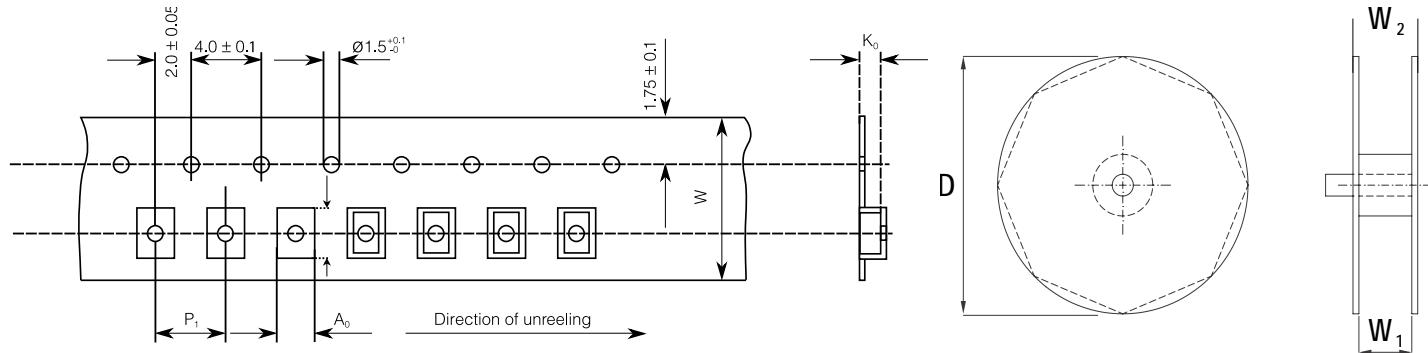
These landing area dimensions have the aim of taking full advantage of the new RoHS 6 terminations design.

We suggest to use a Sn/Ag/Cu solder paste (suggested thickness: 0.10 – 0.15 mm).

If a NOT Lead Free solder paste is used, a minimum peak temperature of 210°C on the component's body is suggested.

Carrier Taping & Packaging (IEC 60286-2)

Horizontal Taping Orientation



Chip Size (EIA) Horizontal Mounting	Dimensions in mm			Taping Specification							
	B	H	L	W	P ₁	A ₀	B ₀	K ₀	D	W ₁	W ₂
	Nominal	Nominal	Nominal	-0.1/+0.3	+/-0.1	Nominal	Nominal	Nominal	-/+2.0	-0/+2	Maximum
1206	1.7	All	3.3	8	4	2	3.8	1.3	180	8	12
1210	2.5	All	3.3	8	4	3	3.8	2.1	180	8	12
1812	3.3	≤ 1.9	4.7	12	8	3.8	5.3	2	330	12	16
1812	3.3	2.1 – 2.4	4.7	12	8	3.9	5.2	2.6	330	12	16

Overview

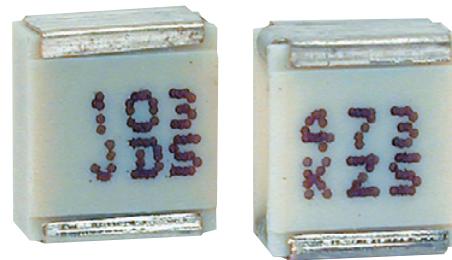
Polyphenylene sulphide (PPS) film capacitor for surface mounting. Encapsulation in self-extinguishing material meeting the requirements of UL 94 V-0.

Applications

Typical applications include timing, filtering and use as a memory capacitor. The SMC Series is designed for high stability, accuracy and temperature.

Benefits

- Rated voltage: 50 – 400 VDC
- Rated voltage: 30 – 200 VAC
- Capacitance range: 0.001 – 3.3 µF
- EIA size: 2220 – 6560
- Capacitance tolerance: ±2%, ±2.5%, ±5%
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



Legacy Part Number System

SMC	5.7	102	J	50	J31	TR12
Series	Chip Length (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Packaging Code
Metallized PPS	5.7 7.3 10.2 12.7 16.5	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	G = ±2% H = ±2.5% J = ±5%	50 100 250 400	See Dimension Table	See Ordering Options Table

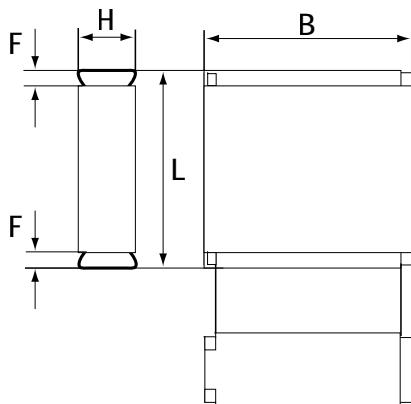
New KEMET Part Number System

F	125	P	L	102	J	050	V
Capacitor Class	Series	Chip Size	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film	Metallized PPS	P = 2220 S = 2820 W = 4036 Y = 5045 Z = 6560	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	G = ±2% R = ±2.5% J = ±5%	050 = 50 100 = 100 250 = 250 400 = 400	See Ordering Options Table

Ordering Options Table

Chip Size (EIA)	Packaging Type	KEMET Packaging Code	Legacy Packaging Code
2220	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR12
	Bulk (Bag)	A	BULK
2824	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR12
	Bulk (Bag)	A	BULK
4036	Standard Packaging Options		
	Tape & Reel (Horizontal Orientation Standard Reel)	V	TR16
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV24
5045	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR24
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV24
6560	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR24
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV44

Dimensions – Millimeters



KEMET Size Code	Legacy Size Code	Chip Size (EIA)	B		H		L		F	
			Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
PL	J31	2220	5.0	+/-0.2	2.5	+/-0.2	5.7	+/-0.2	0.5	Nominal
PP	J33	2220	5.0	+/-0.2	3.0	+/-0.2	5.7	+/-0.2	0.5	Nominal
PU	J35	2220	5.0	+/-0.2	4.0	+/-0.2	5.7	+/-0.2	0.5	Nominal
SG	K31	2824	6.0	+/-0.2	2.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
SL	K33	2824	6.0	+/-0.2	3.0	+/-0.2	7.3	+/-0.2	0.5	Nominal
SP	K35	2824	6.0	+/-0.2	3.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
ST	K37	2824	6.0	+/-0.2	4.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
WP	A31	4036	9.1	+/-0.2	5.5	+/-0.2	10.2	+/-0.2	0.5	Nominal
YR	B31	5045	11.5	+/-0.2	6.5	+/-0.2	12.7	+/-0.2	0.5	Nominal
ZS	C31	6560	15	+/-0.2	7.0	+/-0.2	16.5	+/-0.2	0.5	Nominal

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.

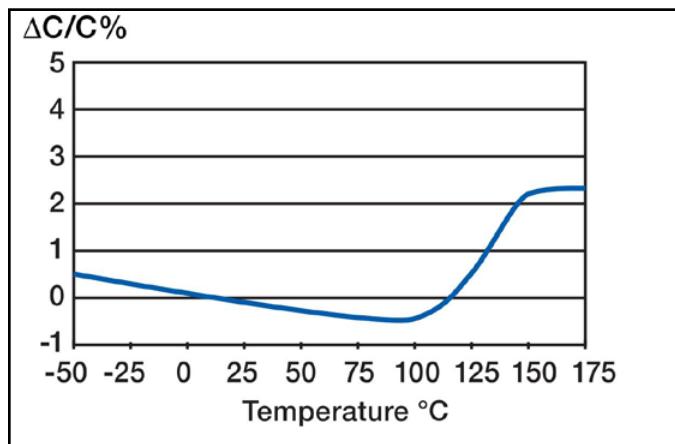


RoHS Compliant

Performance Characteristics

Rated Voltage (VDC)	50	100	250	400
Rated Voltage (VAC)	30	63	160	200
Capacitance Range (μF)	0.001 – 3.3	0.001 – 1.5	0.001 – 0.47	0.001 – 0.22
Chip Size (EIA)	2220 – 6560			
Capacitance Tolerance	$\pm 2\%$, $\pm 2.5\%$, $\pm 5\%$			
Category Temperature Range	-55°C to +125°C			
Rated Temperature	+100°C			
Voltage Derating	The rated voltage should be decreased with 1.25%/°C from +100°C to +125°C and 1.5%/°C from +125°C to 175°C			
Climatic Category	55/125/56			
Test Voltage	1.6 x V_R , 60 seconds			
Insulation Resistance	Measured at +20°C According to IEC 60384-19			
	Minimum Value Between Terminals			
		$C \leq 0.33 \mu\text{F}$	$C > 0.33 \mu\text{F}$	
	$V_R \leq 100$	15,000 MΩ	5,000 MΩ • μF	
Dissipation Factor	$V_R > 100$	30,000 MΩ	10,000 MΩ • μF	
	Maximum Values at +23°C			
		$C \leq 0.1 \mu\text{F}$	$0.1 < C \leq 1 \mu\text{F}$	$C > 1 \mu\text{F}$
	1 kHz	0.15%	0.15%	0.15%
Pulse Rise Time	10 kHz	0.25%	0.25%	0.30%
	100 kHz	0.50%	0.60%	
Pulse Rise Time	The capacitors can withstand an unlimited number of pulses with a dV/dt according to Table 1. For voltages (V) lower than the rated voltage (V_R), the specified dV/dt can be multiplied by V_R/V .			

Capacitance vs. Temperature



Dissipation Factor vs. Temperature

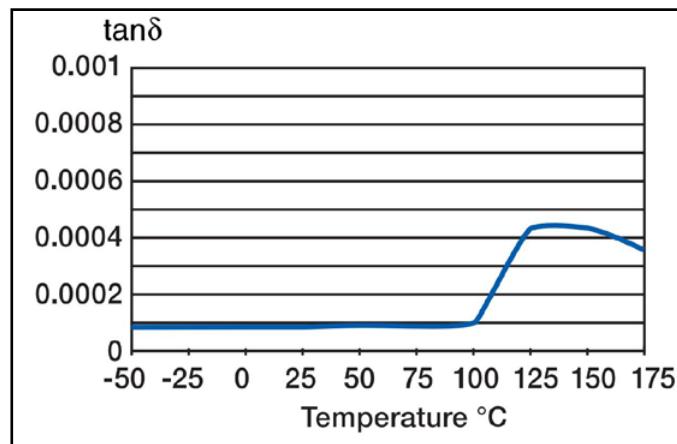


Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.0010	PL/J31	5.0	2.5	5.7	2220	20	F125PL102(1)050(2)	SMC5.7102(1)50J31(2)
50	30	0.0012	PL/J31	5.0	2.5	5.7	2220	20	F125PL122(1)050(2)	SMC5.7122(1)50J31(2)
50	30	0.0015	PL/J31	5.0	2.5	5.7	2220	20	F125PL152(1)050(2)	SMC5.7152(1)50J31(2)
50	30	0.0018	PL/J31	5.0	2.5	5.7	2220	20	F125PL182(1)050(2)	SMC5.7182(1)50J31(2)
50	30	0.0022	PL/J31	5.0	2.5	5.7	2220	20	F125PL222(1)050(2)	SMC5.7222(1)50J31(2)
50	30	0.0027	PL/J31	5.0	2.5	5.7	2220	20	F125PL272(1)050(2)	SMC5.7272(1)50J31(2)
50	30	0.0033	PL/J31	5.0	2.5	5.7	2220	20	F125PL332(1)050(2)	SMC5.7332(1)50J31(2)
50	30	0.0039	PL/J31	5.0	2.5	5.7	2220	20	F125PL392(1)050(2)	SMC5.7392(1)50J31(2)
50	30	0.0047	PL/J31	5.0	2.5	5.7	2220	20	F125PL472(1)050(2)	SMC5.7472(1)50J31(2)
50	30	0.0056	PL/J31	5.0	2.5	5.7	2220	20	F125PL562(1)050(2)	SMC5.7562(1)50J31(2)
50	30	0.0068	PL/J31	5.0	2.5	5.7	2220	20	F125PL682(1)050(2)	SMC5.7682(1)50J31(2)
50	30	0.0082	PL/J31	5.0	2.5	5.7	2220	20	F125PL822(1)050(2)	SMC5.7822(1)50J31(2)
50	30	0.010	PL/J31	5.0	2.5	5.7	2220	20	F125PL103(1)050(2)	SMC5.7103(1)50J31(2)
50	30	0.012	PL/J31	5.0	2.5	5.7	2220	20	F125PL123(1)050(2)	SMC5.7123(1)50J31(2)
50	30	0.015	PL/J31	5.0	2.5	5.7	2220	15	F125PL153(1)050(2)	SMC5.7153(1)50J31(2)
50	30	0.018	PL/J31	5.0	2.5	5.7	2220	15	F125PL183(1)050(2)	SMC5.7183(1)50J31(2)
50	30	0.022	PL/J31	5.0	2.5	5.7	2220	15	F125PL223(1)050(2)	SMC5.7223(1)50J31(2)
50	30	0.027	PL/J31	5.0	2.5	5.7	2220	15	F125PL273(1)050(2)	SMC5.7273(1)50J31(2)
50	30	0.033	PL/J31	5.0	2.5	5.7	2220	15	F125PL333(1)050(2)	SMC5.7333(1)50J31(2)
50	30	0.039	PP/J33	5.0	3.0	5.7	2220	6	F125PP393(1)050(2)	SMC5.7393(1)50J33(2)
50	30	0.047	PP/J33	5.0	3.0	5.7	2220	6	F125PP473(1)050(2)	SMC5.7473(1)50J33(2)
50	30	0.056	PU/J35	5.0	4.0	5.7	2220	6	F125PU563(1)050(2)	SMC5.7563(1)50J35(2)
50	30	0.068	PU/J35	5.0	4.0	5.7	2220	6	F125PU683(1)050(2)	SMC5.7683(1)50J35(2)
50	30	0.082	PU/J35	5.0	4.0	5.7	2220	6	F125PU823(1)050(2)	SMC5.7823(1)50J35(2)
50	30	0.10	PU/J35	5.0	4.0	5.7	2220	6	F125PU104(1)050(2)	SMC5.7104(1)50J35(2)
50	30	0.0010	SG/K31	6.0	2.5	7.3	2824	20	F125SG102(1)050(2)	SMC7.3102(1)50K31(2)
50	30	0.0012	SG/K31	6.0	2.5	7.3	2824	20	F125SG122(1)050(2)	SMC7.3122(1)50K31(2)
50	30	0.0015	SG/K31	6.0	2.5	7.3	2824	20	F125SG152(1)050(2)	SMC7.3152(1)50K31(2)
50	30	0.0018	SG/K31	6.0	2.5	7.3	2824	20	F125SG182(1)050(2)	SMC7.3182(1)50K31(2)
50	30	0.0022	SG/K31	6.0	2.5	7.3	2824	20	F125SG222(1)050(2)	SMC7.3222(1)50K31(2)
50	30	0.0027	SG/K31	6.0	2.5	7.3	2824	20	F125SG272(1)050(2)	SMC7.3272(1)50K31(2)
50	30	0.0033	SG/K31	6.0	2.5	7.3	2824	20	F125SG332(1)050(2)	SMC7.3332(1)50K31(2)
50	30	0.0039	SG/K31	6.0	2.5	7.3	2824	20	F125SG392(1)050(2)	SMC7.3392(1)50K31(2)
50	30	0.0047	SG/K31	6.0	2.5	7.3	2824	20	F125SG472(1)050(2)	SMC7.3472(1)50K31(2)
50	30	0.0056	SG/K31	6.0	2.5	7.3	2824	20	F125SG562(1)050(2)	SMC7.3562(1)50K31(2)
50	30	0.0068	SG/K31	6.0	2.5	7.3	2824	20	F125SG682(1)050(2)	SMC7.3682(1)50K31(2)
50	30	0.0082	SG/K31	6.0	2.5	7.3	2824	20	F125SG822(1)050(2)	SMC7.3822(1)50K31(2)
50	30	0.010	SG/K31	6.0	2.5	7.3	2824	20	F125SG103(1)050(2)	SMC7.3103(1)50K31(2)
50	30	0.012	SG/K31	6.0	2.5	7.3	2824	20	F125SG123(1)050(2)	SMC7.3123(1)50K31(2)
50	30	0.015	SG/K31	6.0	2.5	7.3	2824	20	F125SG153(1)050(2)	SMC7.3153(1)50K31(2)
50	30	0.018	SG/K31	6.0	2.5	7.3	2824	20	F125SG183(1)050(2)	SMC7.3183(1)50K31(2)
50	30	0.022	SG/K31	6.0	2.5	7.3	2824	20	F125SG223(1)050(2)	SMC7.3223(1)50K31(2)
50	30	0.027	SG/K31	6.0	2.5	7.3	2824	20	F125SG273(1)050(2)	SMC7.3273(1)50K31(2)
50	30	0.033	SG/K31	6.0	2.5	7.3	2824	15	F125SG333(1)050(2)	SMC7.3333(1)50K31(2)
50	30	0.039	SG/K31	6.0	2.5	7.3	2824	15	F125SG393(1)050(2)	SMC7.3393(1)50K31(2)
50	30	0.047	SG/K31	6.0	2.5	7.3	2824	15	F125SG473(1)050(2)	SMC7.3473(1)50K31(2)
50	30	0.056	SG/K31	6.0	2.5	7.3	2824	15	F125SG563(1)050(2)	SMC7.3563(1)50K31(2)
50	30	0.068	SG/K31	6.0	2.5	7.3	2824	15	F125SG683(1)050(2)	SMC7.3683(1)50K31(2)
50	30	0.082	SL/K33	6.0	3.0	7.3	2824	6	F125SL823(1)050(2)	SMC7.3823(1)50K33(2)
50	30	0.10	SL/K33	6.0	3.0	7.3	2824	6	F125SL104(1)050(2)	SMC7.3104(1)50K33(2)
50	30	0.12	SP/K35	6.0	3.5	7.3	2824	6	F125SP124(1)050(2)	SMC7.3124(1)50K35(2)
50	30	0.15	SP/K35	6.0	3.5	7.3	2824	6	F125SP154(1)050(2)	SMC7.3154(1)50K35(2)
50	30	0.18	SP/K35	6.0	3.5	7.3	2824	6	F125SP184(1)050(2)	SMC7.3184(1)50K35(2)
50	30	0.22	ST/K37	6.0	4.5	7.3	2824	6	F125ST224(1)050(2)	SMC7.3224(1)50K37(2)
50	30	0.010	WP/A31	9.1	5.5	10.2	4036	4	F125WP103(1)050(2)	SMC10.2103(1)50A31(2)
50	30	0.012	WP/A31	9.1	5.5	10.2	4036	4	F125WP123(1)050(2)	SMC10.2123(1)50A31(2)
50	30	0.015	WP/A31	9.1	5.5	10.2	4036	4	F125WP153(1)050(2)	SMC10.2153(1)50A31(2)
50	30	0.018	WP/A31	9.1	5.5	10.2	4036	4	F125WP183(1)050(2)	SMC10.2183(1)50A31(2)
50	30	0.022	WP/A31	9.1	5.5	10.2	4036	4	F125WP223(1)050(2)	SMC10.2223(1)50A31(2)
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number

(1) $G = \pm 2\%$, $R = \pm 2.5\%$ (Legacy code = H), $J = \pm 5\%$.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.027	WP/A31	9.1	5.5	10.2	4036	4	F125WP273(1)050(2)	SMC10.2273(1)50A31(2)
50	30	0.033	WP/A31	9.1	5.5	10.2	4036	4	F125WP333(1)050(2)	SMC10.2333(1)50A31(2)
50	30	0.039	WP/A31	9.1	5.5	10.2	4036	4	F125WP393(1)050(2)	SMC10.2393(1)50A31(2)
50	30	0.047	WP/A31	9.1	5.5	10.2	4036	4	F125WP473(1)050(2)	SMC10.2473(1)50A31(2)
50	30	0.056	WP/A31	9.1	5.5	10.2	4036	4	F125WP563(1)050(2)	SMC10.2563(1)50A31(2)
50	30	0.068	WP/A31	9.1	5.5	10.2	4036	4	F125WP683(1)050(2)	SMC10.2683(1)50A31(2)
50	30	0.082	WP/A31	9.1	5.5	10.2	4036	4	F125WP823(1)050(2)	SMC10.2823(1)50A31(2)
50	30	0.10	WP/A31	9.1	5.5	10.2	4036	4	F125WP104(1)050(2)	SMC10.2104(1)50A31(2)
50	30	0.12	WP/A31	9.1	5.5	10.2	4036	4	F125WP124(1)050(2)	SMC10.2124(1)50A31(2)
50	30	0.15	WP/A31	9.1	5.5	10.2	4036	4	F125WP154(1)050(2)	SMC10.2154(1)50A31(2)
50	30	0.18	WP/A31	9.1	5.5	10.2	4036	4	F125WP184(1)050(2)	SMC10.2184(1)50A31(2)
50	30	0.22	WP/A31	9.1	5.5	10.2	4036	4	F125WP224(1)050(2)	SMC10.2224(1)50A31(2)
50	30	0.27	WP/A31	9.1	5.5	10.2	4036	4	F125WP274(1)050(2)	SMC10.2274(1)50A31(2)
50	30	0.33	WP/A31	9.1	5.5	10.2	4036	4	F125WP334(1)050(2)	SMC10.2334(1)50A31(2)
50	30	0.39	WP/A31	9.1	5.5	10.2	4036	4	F125WP394(1)050(2)	SMC10.2394(1)50A31(2)
50	30	0.47	WP/A31	9.1	5.5	10.2	4036	4	F125WP474(1)050(2)	SMC10.2474(1)50A31(2)
50	30	0.56	WP/A31	9.1	5.5	10.2	4036	4	F125WP564(1)050(2)	SMC10.2564(1)50A31(2)
50	30	0.68	WP/A31	9.1	5.5	10.2	4036	4	F125WP684(1)050(2)	SMC10.2684(1)50A31(2)
50	30	0.82	WP/A31	9.1	5.5	10.2	4036	4	F125WP824(1)050(2)	SMC10.2824(1)50A31(2)
50	30	1.0	YR/B31	11.5	6.5	12.7	5045	3	F125YR105(1)050(2)	SMC12.7105(1)50B31(2)
50	30	1.2	YR/B31	11.5	6.5	12.7	5045	3	F125YR125(1)050(2)	SMC12.7125(1)50B31(2)
50	30	1.5	YR/B31	11.5	6.5	12.7	5045	3	F125YR155(1)050(2)	SMC12.7155(1)50B31(2)
50	30	1.8	ZS/C31	15.0	7.0	16.5	6560	2	F125ZS185(1)050(2)	SMC16.5185(1)50C31(2)
50	30	2.2	ZS/C31	15.0	7.0	16.5	6560	2	F125ZS225(1)050(2)	SMC16.5225(1)50C31(2)
50	30	2.7	ZS/C31	15.0	7.0	16.5	6560	2	F125ZS275(1)050(2)	SMC16.5275(1)50C31(2)
50	30	3.3	ZS/C31	15.0	7.0	16.5	6560	2	F125ZS335(1)050(2)	SMC16.5335(1)50C31(2)
100	63	0.0010	PL/J31	5.0	2.5	5.7	2220	20	F125PL102(1)100(2)	SMC5.7102(1)100J31(2)
100	63	0.0012	PL/J31	5.0	2.5	5.7	2220	20	F125PL122(1)100(2)	SMC5.7122(1)100J31(2)
100	63	0.0015	PL/J31	5.0	2.5	5.7	2220	20	F125PL152(1)100(2)	SMC5.7152(1)100J31(2)
100	63	0.0018	PL/J31	5.0	2.5	5.7	2220	20	F125PL182(1)100(2)	SMC5.7182(1)100J31(2)
100	63	0.0022	PL/J31	5.0	2.5	5.7	2220	20	F125PL222(1)100(2)	SMC5.7222(1)100J31(2)
100	63	0.0027	PL/J31	5.0	2.5	5.7	2220	20	F125PL272(1)100(2)	SMC5.7272(1)100J31(2)
100	63	0.0033	PL/J31	5.0	2.5	5.7	2220	20	F125PL332(1)100(2)	SMC5.7332(1)100J31(2)
100	63	0.0039	PL/J31	5.0	2.5	5.7	2220	20	F125PL392(1)100(2)	SMC5.7392(1)100J31(2)
100	63	0.0047	PL/J31	5.0	2.5	5.7	2220	20	F125PL472(1)100(2)	SMC5.7472(1)100J31(2)
100	63	0.0056	PL/J31	5.0	2.5	5.7	2220	20	F125PL562(1)100(2)	SMC5.7562(1)100J31(2)
100	63	0.0068	PL/J31	5.0	2.5	5.7	2220	20	F125PL682(1)100(2)	SMC5.7682(1)100J31(2)
100	63	0.0082	PL/J31	5.0	2.5	5.7	2220	20	F125PL822(1)100(2)	SMC5.7822(1)100J31(2)
100	63	0.010	PL/J31	5.0	2.5	5.7	2220	20	F125PL103(1)100(2)	SMC5.7103(1)100J31(2)
100	63	0.012	PL/J31	5.0	2.5	5.7	2220	20	F125PL123(1)100(2)	SMC5.7123(1)100J31(2)
100	63	0.015	PL/J31	5.0	2.5	5.7	2220	15	F125PL153(1)100(2)	SMC5.7153(1)100J31(2)
100	63	0.018	PP/J33	5.0	3.0	5.7	2220	15	F125PP183(1)100(2)	SMC5.7183(1)100J33(2)
100	63	0.022	PP/J33	5.0	3.0	5.7	2220	15	F125PP223(1)100(2)	SMC5.7223(1)100J33(2)
100	63	0.027	PUI/J35	5.0	4.0	5.7	2220	15	F125PU273(1)100(2)	SMC5.7273(1)100J35(2)
100	63	0.033	PUI/J35	5.0	4.0	5.7	2220	15	F125PU333(1)100(2)	SMC5.7333(1)100J35(2)
100	63	0.0010	SG/K31	6.0	2.5	7.3	2824	20	F125SG102(1)100(2)	SMC7.3102(1)100K31(2)
100	63	0.0012	SG/K31	6.0	2.5	7.3	2824	20	F125SG122(1)100(2)	SMC7.3122(1)100K31(2)
100	63	0.0015	SG/K31	6.0	2.5	7.3	2824	20	F125SG152(1)100(2)	SMC7.3152(1)100K31(2)
100	63	0.0018	SG/K31	6.0	2.5	7.3	2824	20	F125SG182(1)100(2)	SMC7.3182(1)100K31(2)
100	63	0.0022	SG/K31	6.0	2.5	7.3	2824	20	F125SG222(1)100(2)	SMC7.3222(1)100K31(2)
100	63	0.0027	SG/K31	6.0	2.5	7.3	2824	20	F125SG272(1)100(2)	SMC7.3272(1)100K31(2)
100	63	0.0033	SG/K31	6.0	2.5	7.3	2824	20	F125SG332(1)100(2)	SMC7.3332(1)100K31(2)
100	63	0.0039	SG/K31	6.0	2.5	7.3	2824	20	F125SG392(1)100(2)	SMC7.3392(1)100K31(2)
100	63	0.0047	SG/K31	6.0	2.5	7.3	2824	20	F125SG472(1)100(2)	SMC7.3472(1)100K31(2)
100	63	0.0056	SG/K31	6.0	2.5	7.3	2824	20	F125SG562(1)100(2)	SMC7.3562(1)100K31(2)
100	63	0.0068	SG/K31	6.0	2.5	7.3	2824	20	F125SG682(1)100(2)	SMC7.3682(1)100K31(2)
100	63	0.0082	SG/K31	6.0	2.5	7.3	2824	20	F125SG822(1)100(2)	SMC7.3822(1)100K31(2)
100	63	0.010	SG/K31	6.0	2.5	7.3	2824	20	F125SG103(1)100(2)	SMC7.3103(1)100K31(2)
100	63	0.012	SG/K31	6.0	2.5	7.3	2824	20	F125SG123(1)100(2)	SMC7.3123(1)100K31(2)

(1) $G = \pm 2\%$, $R = \pm 2.5\%$ (Legacy code = H), $J = \pm 5\%$.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
100	63	0.015	SG/K31	6.0	2.5	7.3	2824	20	F125SG153(1)100(2)	SMC7.3153(1)100K31(2)
100	63	0.018	SG/K31	6.0	2.5	7.3	2824	20	F125SG183(1)100(2)	SMC7.3183(1)100K31(2)
100	63	0.022	SG/K31	6.0	2.5	7.3	2824	20	F125SG223(1)100(2)	SMC7.3223(1)100K31(2)
100	63	0.027	SL/K33	6.0	3.0	7.3	2824	15	F125SL273(1)100(2)	SMC7.3273(1)100K33(2)
100	63	0.033	SL/K33	6.0	3.0	7.3	2824	15	F125SL333(1)100(2)	SMC7.3333(1)100K33(2)
100	63	0.039	SP/K35	6.0	3.5	7.3	2824	15	F125SP393(1)100(2)	SMC7.3393(1)100K35(2)
100	63	0.047	SP/K35	6.0	3.5	7.3	2824	15	F125SP473(1)100(2)	SMC7.3473(1)100K35(2)
100	63	0.056	ST/K37	6.0	4.5	7.3	2824	15	F125ST563(1)100(2)	SMC7.3563(1)100K37(2)
100	63	0.068	ST/K37	6.0	4.5	7.3	2824	15	F125ST683(1)100(2)	SMC7.3683(1)100K37(2)
100	63	0.010	WPI/A31	9.1	5.5	10.2	4036	6	F125WP103(1)100(2)	SMC10.2103(1)100A31(2)
100	63	0.012	WPI/A31	9.1	5.5	10.2	4036	6	F125WP123(1)100(2)	SMC10.2123(1)100A31(2)
100	63	0.015	WPI/A31	9.1	5.5	10.2	4036	6	F125WP153(1)100(2)	SMC10.2153(1)100A31(2)
100	63	0.018	WPI/A31	9.1	5.5	10.2	4036	6	F125WP183(1)100(2)	SMC10.2183(1)100A31(2)
100	63	0.022	WPI/A31	9.1	5.5	10.2	4036	6	F125WP223(1)100(2)	SMC10.2223(1)100A31(2)
100	63	0.027	WPI/A31	9.1	5.5	10.2	4036	6	F125WP273(1)100(2)	SMC10.2273(1)100A31(2)
100	63	0.033	WPI/A31	9.1	5.5	10.2	4036	6	F125WP333(1)100(2)	SMC10.2333(1)100A31(2)
100	63	0.039	WPI/A31	9.1	5.5	10.2	4036	6	F125WP393(1)100(2)	SMC10.2393(1)100A31(2)
100	63	0.047	WPI/A31	9.1	5.5	10.2	4036	6	F125WP473(1)100(2)	SMC10.2473(1)100A31(2)
100	63	0.056	WPI/A31	9.1	5.5	10.2	4036	6	F125WP563(1)100(2)	SMC10.2563(1)100A31(2)
100	63	0.068	WPI/A31	9.1	5.5	10.2	4036	6	F125WP683(1)100(2)	SMC10.2683(1)100A31(2)
100	63	0.082	WPI/A31	9.1	5.5	10.2	4036	6	F125WP823(1)100(2)	SMC10.2823(1)100A31(2)
100	63	0.10	WPI/A31	9.1	5.5	10.2	4036	6	F125WP104(1)100(2)	SMC10.2104(1)100A31(2)
100	63	0.12	WPI/A31	9.1	5.5	10.2	4036	6	F125WP124(1)100(2)	SMC10.2124(1)100A31(2)
100	63	0.15	WPI/A31	9.1	5.5	10.2	4036	6	F125WP154(1)100(2)	SMC10.2154(1)100A31(2)
100	63	0.18	WPI/A31	9.1	5.5	10.2	4036	6	F125WP184(1)100(2)	SMC10.2184(1)100A31(2)
100	63	0.22	WPI/A31	9.1	5.5	10.2	4036	6	F125WP224(1)100(2)	SMC10.2224(1)100A31(2)
100	63	0.27	WPI/A31	9.1	5.5	10.2	4036	6	F125WP274(1)100(2)	SMC10.2274(1)100A31(2)
100	63	0.33	YR/B31	11.5	6.5	12.7	5045	5	F125YR334(1)100(2)	SMC12.7334(1)100B31(2)
100	63	0.39	YR/B31	11.5	6.5	12.7	5045	5	F125YR394(1)100(2)	SMC12.7394(1)100B31(2)
100	63	0.47	YR/B31	11.5	6.5	12.7	5045	5	F125YR474(1)100(2)	SMC12.7474(1)100B31(2)
100	63	0.56	YR/B31	11.5	6.5	12.7	5045	5	F125YR564(1)100(2)	SMC12.7564(1)100B31(2)
100	63	0.68	ZS/C31	15.0	7.0	16.5	6560	3	F125ZS684(1)100(2)	SMC16.5684(1)100C31(2)
100	63	0.82	ZS/C31	15.0	7.0	16.5	6560	3	F125ZS824(1)100(2)	SMC16.5824(1)100C31(2)
100	63	1.0	ZS/C31	15.0	7.0	16.5	6560	3	F125ZS105(1)100(2)	SMC16.5105(1)100C31(2)
100	63	1.2	ZS/C31	15.0	7.0	16.5	6560	3	F125ZS125(1)100(2)	SMC16.5125(1)100C31(2)
100	63	1.5	ZS/C31	15.0	7.0	16.5	6560	3	F125ZS155(1)100(2)	SMC16.5155(1)100C31(2)
250	160	0.0010	PL/J31	5.0	2.5	5.7	2220	20	F125PL102(1)250(2)	SMC5.7102(1)250J31(2)
250	160	0.0012	PL/J31	5.0	2.5	5.7	2220	20	F125PL122(1)250(2)	SMC5.7122(1)250J31(2)
250	160	0.0015	PL/J31	5.0	2.5	5.7	2220	20	F125PL152(1)250(2)	SMC5.7152(1)250J31(2)
250	160	0.0018	PL/J31	5.0	2.5	5.7	2220	20	F125PL182(1)250(2)	SMC5.7182(1)250J31(2)
250	160	0.0022	PL/J31	5.0	2.5	5.7	2220	20	F125PL222(1)250(2)	SMC5.7222(1)250J31(2)
250	160	0.0027	PL/J31	5.0	2.5	5.7	2220	20	F125PL272(1)250(2)	SMC5.7272(1)250J31(2)
250	160	0.0033	PL/J31	5.0	2.5	5.7	2220	20	F125PL332(1)250(2)	SMC5.7332(1)250J31(2)
250	160	0.0039	PL/J31	5.0	2.5	5.7	2220	20	F125PL392(1)250(2)	SMC5.7392(1)250J31(2)
250	160	0.0047	PL/J31	5.0	2.5	5.7	2220	20	F125PL472(1)250(2)	SMC5.7472(1)250J31(2)
250	160	0.0056	PP/J33	5.0	3.0	5.7	2220	20	F125PP562(1)250(2)	SMC5.7562(1)250J33(2)
250	160	0.0068	PP/J33	5.0	3.0	5.7	2220	20	F125PP682(1)250(2)	SMC5.7682(1)250J33(2)
250	160	0.0082	PU/J35	5.0	4.0	5.7	2220	20	F125PU822(1)250(2)	SMC5.7822(1)250J35(2)
250	160	0.010	PU/J35	5.0	4.0	5.7	2220	20	F125PU103(1)250(2)	SMC5.7103(1)250J35(2)
250	160	0.0010	SG/K31	6.0	2.5	7.3	2824	20	F125SG102(1)250(2)	SMC7.3102(1)250K31(2)
250	160	0.0012	SG/K31	6.0	2.5	7.3	2824	20	F125SG122(1)250(2)	SMC7.3122(1)250K31(2)
250	160	0.0015	SG/K31	6.0	2.5	7.3	2824	20	F125SG152(1)250(2)	SMC7.3152(1)250K31(2)
250	160	0.0018	SG/K31	6.0	2.5	7.3	2824	20	F125SG182(1)250(2)	SMC7.3182(1)250K31(2)
250	160	0.0022	SG/K31	6.0	2.5	7.3	2824	20	F125SG222(1)250(2)	SMC7.3222(1)250K31(2)
250	160	0.0027	SG/K31	6.0	2.5	7.3	2824	20	F125SG272(1)250(2)	SMC7.3272(1)250K31(2)
250	160	0.0033	SG/K31	6.0	2.5	7.3	2824	20	F125SG332(1)250(2)	SMC7.3332(1)250K31(2)
250	160	0.0039	SG/K31	6.0	2.5	7.3	2824	20	F125SG392(1)250(2)	SMC7.3392(1)250K31(2)
250	160	0.0047	SG/K31	6.0	2.5	7.3	2824	20	F125SG472(1)250(2)	SMC7.3472(1)250K31(2)
250	160	0.0056	SG/K31	6.0	2.5	7.3	2824	20	F125SG562(1)250(2)	SMC7.3562(1)250K31(2)
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number

(1) $G = \pm 2\%$, $R = \pm 2.5\%$ (Legacy code = H), $J = \pm 5\%$.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
250	160	0.0068	SG/K31	6.0	2.5	7.3	2824	20	F125SG682(1)250(2)	SMC7.3682(1)250K31(2)
250	160	0.0082	SG/K31	6.0	2.5	7.3	2824	20	F125SG822(1)250(2)	SMC7.3822(1)250K31(2)
250	160	0.010	SL/K33	6.0	3.0	7.3	2824	20	F125SL103(1)250(2)	SMC7.3103(1)250K33(2)
250	160	0.012	SL/K33	6.0	3.0	7.3	2824	20	F125SL123(1)250(2)	SMC7.3123(1)250K33(2)
250	160	0.015	SL/K33	6.0	3.0	7.3	2824	20	F125SL153(1)250(2)	SMC7.3153(1)250K33(2)
250	160	0.018	SP/K35	6.0	3.5	7.3	2824	20	F125SP183(1)250(2)	SMC7.3183(1)250K35(2)
250	160	0.022	SP/K35	6.0	3.5	7.3	2824	20	F125SP223(1)250(2)	SMC7.3223(1)250K35(2)
250	160	0.010	WP/A31	9.1	5.5	10.2	4036	10	F125WP103(1)250(2)	SMC10.2103(1)250A31(2)
250	160	0.012	WP/A31	9.1	5.5	10.2	4036	10	F125WP123(1)250(2)	SMC10.2123(1)250A31(2)
250	160	0.015	WP/A31	9.1	5.5	10.2	4036	10	F125WP153(1)250(2)	SMC10.2153(1)250A31(2)
250	160	0.018	WP/A31	9.1	5.5	10.2	4036	10	F125WP183(1)250(2)	SMC10.2183(1)250A31(2)
250	160	0.022	WP/A31	9.1	5.5	10.2	4036	10	F125WP223(1)250(2)	SMC10.2223(1)250A31(2)
250	160	0.027	WP/A31	9.1	5.5	10.2	4036	10	F125WP273(1)250(2)	SMC10.2273(1)250A31(2)
250	160	0.033	WP/A31	9.1	5.5	10.2	4036	10	F125WP333(1)250(2)	SMC10.2333(1)250A31(2)
250	160	0.039	WP/A31	9.1	5.5	10.2	4036	10	F125WP393(1)250(2)	SMC10.2393(1)250A31(2)
250	160	0.047	WP/A31	9.1	5.5	10.2	4036	10	F125WP473(1)250(2)	SMC10.2473(1)250A31(2)
250	160	0.056	WP/A31	9.1	5.5	10.2	4036	10	F125WP563(1)250(2)	SMC10.2563(1)250A31(2)
250	160	0.068	WP/A31	9.1	5.5	10.2	4036	10	F125WP683(1)250(2)	SMC10.2683(1)250A31(2)
250	160	0.082	WP/A31	9.1	5.5	10.2	4036	10	F125WP823(1)250(2)	SMC10.2823(1)250A31(2)
250	160	0.10	WP/A31	9.1	5.5	10.2	4036	10	F125WP104(1)250(2)	SMC10.2104(1)250A31(2)
250	160	0.12	YR/B31	11.5	6.5	12.7	5045	8	F125YR124(1)250(2)	SMC12.7124(1)250B31(2)
250	160	0.15	YR/B31	11.5	6.5	12.7	5045	8	F125YR154(1)250(2)	SMC12.7154(1)250B31(2)
250	160	0.18	YR/B31	11.5	6.5	12.7	5045	8	F125YR184(1)250(2)	SMC12.7184(1)250B31(2)
250	160	0.22	ZS/C31	15.0	7.0	16.5	6560	5	F125ZS224(1)250(2)	SMC16.5224(1)250C31(2)
250	160	0.27	ZS/C31	15.0	7.0	16.5	6560	5	F125ZS274(1)250(2)	SMC16.5274(1)250C31(2)
250	160	0.33	ZS/C31	15.0	7.0	16.5	6560	5	F125ZS334(1)250(2)	SMC16.5334(1)250C31(2)
250	160	0.39	ZS/C31	15.0	7.0	16.5	6560	5	F125ZS394(1)250(2)	SMC16.5394(1)250C31(2)
250	160	0.47	ZS/C31	15.0	7.0	16.5	6560	5	F125ZS474(1)250(2)	SMC16.5474(1)250C31(2)
400	200	0.0010	PL/J31	5.0	2.5	5.7	2220	40	F125PL102(1)400(2)	SMC5.7102(1)400J31(2)
400	200	0.0012	PL/J31	5.0	2.5	5.7	2220	40	F125PL122(1)400(2)	SMC5.7122(1)400J31(2)
400	200	0.0015	PL/J31	5.0	2.5	5.7	2220	40	F125PL152(1)400(2)	SMC5.7152(1)400J31(2)
400	200	0.0018	PP/J33	5.0	3.0	5.7	2220	40	F125PP182(1)400(2)	SMC5.7182(1)400J33(2)
400	200	0.0022	PP/J33	5.0	3.0	5.7	2220	40	F125PP222(1)400(2)	SMC5.7222(1)400J33(2)
400	200	0.0027	PU/J35	5.0	4.0	5.7	2220	40	F125PU272(1)400(2)	SMC5.7272(1)400J35(2)
400	200	0.0033	PU/J35	5.0	4.0	5.7	2220	40	F125PU332(1)400(2)	SMC5.7332(1)400J35(2)
400	200	0.0010	SG/K31	6.0	2.5	7.3	2824	25	F125SG102(1)400(2)	SMC7.3102(1)400K31(2)
400	200	0.0012	SG/K31	6.0	2.5	7.3	2824	25	F125SG122(1)400(2)	SMC7.3122(1)400K31(2)
400	200	0.0015	SG/K31	6.0	2.5	7.3	2824	25	F125SG152(1)400(2)	SMC7.3152(1)400K31(2)
400	200	0.0018	SG/K31	6.0	2.5	7.3	2824	25	F125SG182(1)400(2)	SMC7.3182(1)400K31(2)
400	200	0.0022	SG/K31	6.0	2.5	7.3	2824	25	F125SG222(1)400(2)	SMC7.3222(1)400K31(2)
400	200	0.0027	SG/K31	6.0	2.5	7.3	2824	25	F125SG272(1)400(2)	SMC7.3272(1)400K31(2)
400	200	0.0033	SL/K33	6.0	3.0	7.3	2824	25	F125SL332(1)400(2)	SMC7.3332(1)400K33(2)
400	200	0.0039	SL/K33	6.0	3.0	7.3	2824	25	F125SL392(1)400(2)	SMC7.3392(1)400K33(2)
400	200	0.0047	SL/K33	6.0	3.0	7.3	2824	25	F125SL472(1)400(2)	SMC7.3472(1)400K33(2)
400	200	0.0056	SP/K35	6.0	3.5	7.3	2824	25	F125SP562(1)400(2)	SMC7.3562(1)400K35(2)
400	200	0.0068	SP/K35	6.0	3.5	7.3	2824	25	F125SP682(1)400(2)	SMC7.3682(1)400K35(2)
400	200	0.0082	ST/K37	6.0	4.5	7.3	2824	25	F125ST822(1)400(2)	SMC7.3822(1)400K37(2)
400	200	0.010	ST/K37	6.0	4.5	7.3	2824	25	F125ST103(1)400(2)	SMC7.3103(1)400K37(2)
400	200	0.010	WP/A31	9.1	5.5	10.2	4036	15	F125WP103(1)400(2)	SMC10.2103(1)400A31(2)
400	200	0.012	WP/A31	9.1	5.5	10.2	4036	15	F125WP123(1)400(2)	SMC10.2123(1)400A31(2)
400	200	0.015	WP/A31	9.1	5.5	10.2	4036	15	F125WP153(1)400(2)	SMC10.2153(1)400A31(2)
400	200	0.018	WP/A31	9.1	5.5	10.2	4036	15	F125WP183(1)400(2)	SMC10.2183(1)400A31(2)
400	200	0.022	WP/A31	9.1	5.5	10.2	4036	15	F125WP223(1)400(2)	SMC10.2223(1)400A31(2)
400	200	0.027	WP/A31	9.1	5.5	10.2	4036	15	F125WP273(1)400(2)	SMC10.2273(1)400A31(2)
400	200	0.033	WP/A31	9.1	5.5	10.2	4036	15	F125WP333(1)400(2)	SMC10.2333(1)400A31(2)
400	200	0.039	WP/A31	9.1	5.5	10.2	4036	15	F125WP393(1)400(2)	SMC10.2393(1)400A31(2)
400	200	0.047	YR/B31	11.5	6.5	12.7	5045	10	F125YR473(1)400(2)	SMC12.7473(1)400B31(2)
400	200	0.056	YR/B31	11.5	6.5	12.7	5045	10	F125YR563(1)400(2)	SMC12.7563(1)400B31(2)
400	200	0.068	YR/B31	11.5	6.5	12.7	5045	10	F125YR683(1)400(2)	SMC12.7683(1)400B31(2)

(1) $G = \pm 2\%$, $R = \pm 2.5\%$ (Legacy code = H), J = $\pm 5\%$.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

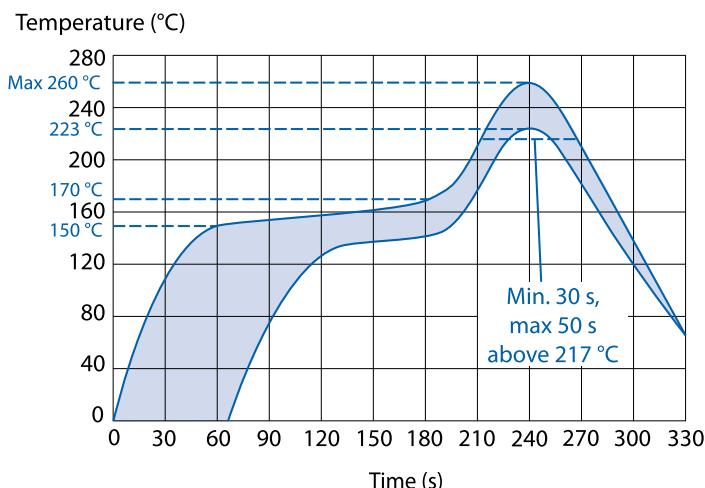
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
400	200	0.082	YR/B31	11.5	6.5	12.7	5045	10	F125YR823(1)400(2)	SMC12.7823(1)400B31(2)
400	200	0.10	ZS/C31	15.0	7.0	16.5	6560	8	F125ZS104(1)400(2)	SMC16.5104(1)400C31(2)
400	200	0.12	ZS/C31	15.0	7.0	16.5	6560	8	F125ZS124(1)400(2)	SMC16.5124(1)400C31(2)
400	200	0.15	ZS/C31	15.0	7.0	16.5	6560	8	F125ZS154(1)400(2)	SMC16.5154(1)400C31(2)
400	200	0.18	ZS/C31	15.0	7.0	16.5	6560	8	F125ZS184(1)400(2)	SMC16.5184(1)400C31(2)
400	200	0.22	ZS/C31	15.0	7.0	16.5	6560	8	F125ZS224(1)400(2)	SMC16.5224(1)400C31(2)
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number

(1) G = $\pm 2\%$, R = $\pm 2.5\%$ (Legacy code = H), J = $\pm 5\%$.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 260°C.



Marking

- Capacitance
- Capacitance tolerance code
- Rated voltage code
- Capacitor type S for SMC
- Manufacturing date code

Packaging Quantities

Chip Size (EIA)	Base (mm)	Height (mm)	Length (mm)	Bulk	Reel Horizontal Orientation	Reel Vertical Orientation
2220	5	2.5	5.7	2000	3100	
2220	5	3	5.7	2000	2400	
2220	5	4	5.7	2000	2100	
2824	6	2.5	7.3	2000	3100	
2824	6	3	7.3	2000	2500	
2824	6	3.5	7.3	2000	2300	
2824	6	4.5	7.3	1000	1700	
4036	9.1	5.5	10.2	1000	800	500
5045	11.5	6.5	12.7	1000	600	400
6560	15	7	16.5	800	500	200

General Purpose, High Stability and AC Line EMI Suppression
**SPC Series Encapsulated Double Metallized,
Size 2824 – 6560, 100 – 630 VDC**

The Capacitance Company
KEMET
CHARGED.[®]

Overview

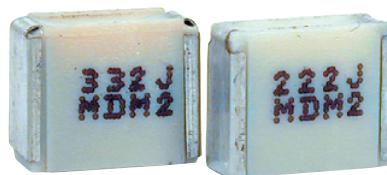
Film capacitor for surface mounting. Double sided metallized film as electrode. Plain polyethylene sulfide (PPS) as dielectric. Rugged box encapsulation in self-extinguishing material meeting the requirements of UL 94 V-0.

Applications

The SPC Series is designed for high frequency coupling and decoupling as well as general high speed applications requiring high dV/dt such as pulse operation in switched-mode power supply (SMPS).

Benefits

- Rated voltage: 100 – 630 VDC
- Rated voltage: 63 – 350 VAC
- Capacitance range: 0.00047 – 0.68 µF
- EIA size: 2824 – 6560
- Capacitance tolerance: ±2%, ±2.5%, ±5%, ±10%
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



Legacy Part Number System

SPC	7.3	471	K	100	K31	TR12
Series	Chip Length (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Packaging Code
Double Metallized PPS	7.3 10.2 12.7 16.5	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	G = ±2% H = ±2.5% J = ±5% K = ±10%	100 250 400 630	See Dimension Table	See Ordering Options Table

New KEMET Part Number System

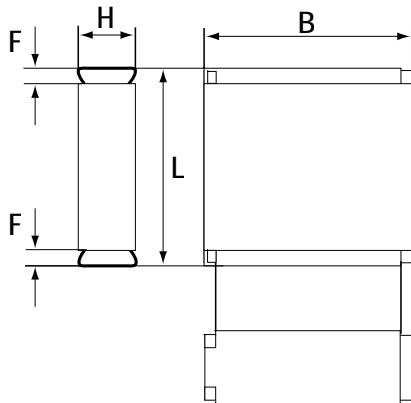
F	127	S	G	471	K	100	V
Capacitor Class	Series	Chip Size	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film	Double Metallized PPS	S = 2824 W = 4036 Y = 5045 Z = 6560	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	G = ±2% R = ±2.5% J = ±5% K = ±10%	100 250 400 630	See Ordering Options Table

One world. One KEMET

Ordering Options Table

Chip Size (EIA)	Packaging Type	KEMET Packaging Code	Legacy Packaging Code
2824	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR12
	Bulk (Bag)	A	BULK
4036	Standard Packaging Options		
	Tape & Reel (Horizontal Orientation Standard Reel)	V	TR16
	Bulk (Bag)	A	BULK
	Other Packaging Options		
5045	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV24
	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR24
	Bulk (Bag)	A	BULK
6560	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV24
	Standard Packaging Options		
	Tape & Reel (Standard Reel)	V	TR24
	Bulk (Bag)	A	BULK
	Other Packaging Options		
	Tape & Reel (Vertical Orientation Standard Reel)	Y	TV44

Dimensions – Millimeters



KEMET Size Code	Legacy Size Code	Chip Size (EIA)	B		H		L		F	
			Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
SG	K31	2824	6.0	+/-0.2	2.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
SL	K33	2824	6.0	+/-0.2	3.0	+/-0.2	7.3	+/-0.2	0.5	Nominal
SP	K35	2824	6.0	+/-0.2	3.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
ST	K37	2824	6.0	+/-0.2	4.5	+/-0.2	7.3	+/-0.2	0.5	Nominal
WP	A31	4036	9.1	+/-0.2	5.5	+/-0.2	10.2	+/-0.2	0.5	Nominal
YR	B31	5045	11.5	+/-0.2	6.5	+/-0.2	12.7	+/-0.2	0.5	Nominal
ZS	C31	6560	15	+/-0.2	7.0	+/-0.2	16.5	+/-0.2	0.5	Nominal

Environmental Compliance

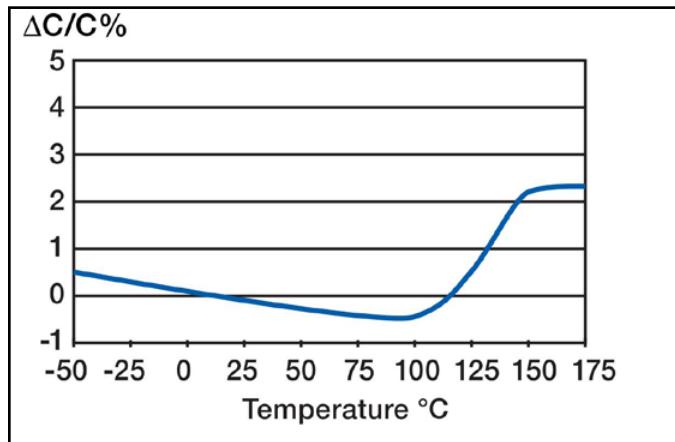
All KEMET surface mount capacitors are RoHS Compliant.



Performance Characteristics

Rated Voltage (VDC)	100	250	400	630
Rated Voltage (VAC)	63	160	250	350
Capacitance Range (μF)	0.00047 – 0.68	0.00047 – 0.33	0.00047 – 0.15	0.00047 – 0.10
Chip Size (EIA)	2824 – 6560			
Capacitance Tolerance	$\pm 2\%$, $\pm 2.5\%$, $\pm 5\%$, $\pm 10\%$			
Category Temperature Range	-55°C to +125°C			
Rated Temperature	+100°C			
Voltage Derating	The rated voltage should be decreased with 1.25%/°C from +100°C to +125°C and 1.5%/°C from +125°C to 175°C			
Climatic Category	55/125/56			
Test Voltage	1.6 x V_R , 60 seconds			
Insulation Resistance	Measured at +20°C According to IEC 60384-19			
	Minimum Value Between Terminals			
	$V_R \leq 100$	$C \leq 0.33 \mu\text{F}$	$C > 0.33 \mu\text{F}$	
		50,000 MΩ	16,500 MΩ • μF	
	$V_R > 100$	100,000 MΩ		
Dissipation Factor	Maximum Values at +23°C			
	1 kHz	$C \leq 0.1 \mu\text{F}$	$0.1 < C < 0.68 \mu\text{F}$	
		0.10%	0.10%	
		0.15%	0.15%	
Pulse Rise Time	The capacitors can withstand an unlimited number of pulses with a dV/dt according to Table 1. For voltages (V) lower than the rated voltage (V_R), the specified dV/dt can be multiplied by V_R/V .			

Capacitance vs. Temperature



Dissipation Factor vs. Temperature

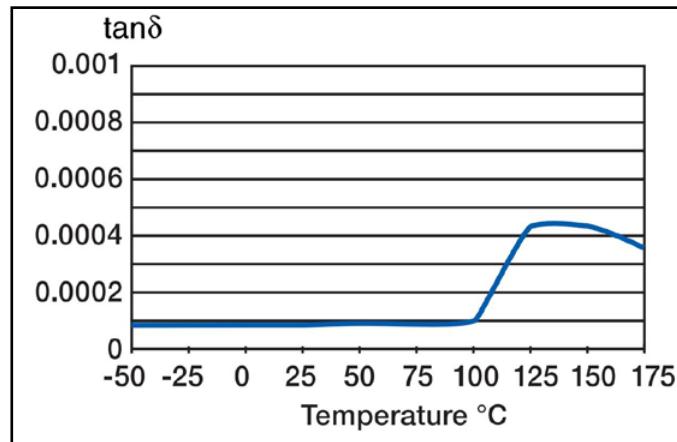


Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
100	63	0.00047	SG/K31	6.0	2.5	7.3	2824	800	F127SG471(1)100(2)	SPC7.3471(1)100K31(2)
100	63	0.00068	SG/K31	6.0	2.5	7.3	2824	800	F127SG681(1)100(2)	SPC7.3681(1)100K31(2)
100	63	0.0010	SG/K31	6.0	2.5	7.3	2824	800	F127SG102(1)100(2)	SPC7.3102(1)100K31(2)
100	63	0.0015	SG/K31	6.0	2.5	7.3	2824	800	F127SG152(1)100(2)	SPC7.3152(1)100K31(2)
100	63	0.0022	SG/K31	6.0	2.5	7.3	2824	800	F127SG222(1)100(2)	SPC7.3222(1)100K31(2)
100	63	0.0033	SG/K31	6.0	2.5	7.3	2824	800	F127SG332(1)100(2)	SPC7.3332(1)100K31(2)
100	63	0.0047	SG/K31	6.0	2.5	7.3	2824	800	F127SG472(1)100(2)	SPC7.3472(1)100K31(2)
100	63	0.0068	SG/K31	6.0	2.5	7.3	2824	800	F127SG682(1)100(2)	SPC7.3682(1)100K31(2)
100	63	0.010	SG/K31	6.0	2.5	7.3	2824	800	F127SG103(1)100(2)	SPC7.3103(1)100K31(2)
100	63	0.015	SL/K33	6.0	3.0	7.3	2824	800	F127SL153(1)100(2)	SPC7.3153(1)100K33(2)
100	63	0.022	SP/K35	6.0	3.5	7.3	2824	800	F127SP223(1)100(2)	SPC7.3223(1)100K35(2)
100	63	0.033	ST/K37	6.0	4.5	7.3	2824	800	F127ST333(1)100(2)	SPC7.3333(1)100K37(2)
100	63	0.0068	WPI/A31	9.1	5.5	10.2	4036	600	F127WP682(1)100(2)	SPC10.2682(1)100A31(2)
100	63	0.010	WPI/A31	9.1	5.5	10.2	4036	600	F127WP103(1)100(2)	SPC10.2103(1)100A31(2)
100	63	0.015	WPI/A31	9.1	5.5	10.2	4036	600	F127WP153(1)100(2)	SPC10.2153(1)100A31(2)
100	63	0.022	WPI/A31	9.1	5.5	10.2	4036	600	F127WP223(1)100(2)	SPC10.2223(1)100A31(2)
100	63	0.033	WPI/A31	9.1	5.5	10.2	4036	600	F127WP333(1)100(2)	SPC10.2333(1)100A31(2)
100	63	0.047	WPI/A31	9.1	5.5	10.2	4036	600	F127WP473(1)100(2)	SPC10.2473(1)100A31(2)
100	63	0.068	WPI/A31	9.1	5.5	10.2	4036	600	F127WP683(1)100(2)	SPC10.2683(1)100A31(2)
100	63	0.10	WPI/A31	9.1	5.5	10.2	4036	600	F127WP104(1)100(2)	SPC10.2104(1)100A31(2)
100	63	0.15	YR/B31	11.5	6.5	12.7	5045	400	F127YR154(1)100(2)	SPC12.7154(1)100B31(2)
100	63	0.22	YR/B31	11.5	6.5	12.7	5045	400	F127YR224(1)100(2)	SPC12.7224(1)100B31(2)
100	63	0.33	ZS/C31	15.0	7.0	16.5	6560	150	F127ZS334(1)100(2)	SPC16.5334(1)100C31(2)
100	63	0.47	ZS/C31	15.0	7.0	16.5	6560	150	F127ZS474(1)100(2)	SPC16.5474(1)100C31(2)
100	63	0.68	ZS/C31	15.0	7.0	16.5	6560	150	F127ZS684(1)100(2)	SPC16.5684(1)100C31(2)
250	160	0.00047	SG/K31	6.0	2.5	7.3	2824	1200	F127SG471(1)250(2)	SPC7.3471(1)250K31(2)
250	160	0.00068	SG/K31	6.0	2.5	7.3	2824	1200	F127SG681(1)250(2)	SPC7.3681(1)250K31(2)
250	160	0.0010	SG/K31	6.0	2.5	7.3	2824	1200	F127SG102(1)250(2)	SPC7.3102(1)250K31(2)
250	160	0.0015	SG/K31	6.0	2.5	7.3	2824	1200	F127SG152(1)250(2)	SPC7.3152(1)250K31(2)
250	160	0.0022	SG/K31	6.0	2.5	7.3	2824	1200	F127SG222(1)250(2)	SPC7.3222(1)250K31(2)
250	160	0.0033	SG/K31	6.0	2.5	7.3	2824	1200	F127SG332(1)250(2)	SPC7.3332(1)250K31(2)
250	160	0.0047	SG/K31	6.0	2.5	7.3	2824	1200	F127SG472(1)250(2)	SPC7.3472(1)250K31(2)
250	160	0.0068	SL/K33	6.0	3.0	7.3	2824	1200	F127SL682(1)250(2)	SPC7.3682(1)250K33(2)
250	160	0.010	SP/K35	6.0	3.5	7.3	2824	1200	F127SP103(1)250(2)	SPC7.3103(1)250K35(2)
250	160	0.015	ST/K37	6.0	4.5	7.3	2824	1200	F127ST153(1)250(2)	SPC7.3153(1)250K37(2)
250	160	0.068	WPI/A31	9.1	5.5	10.2	4036	1000	F127WP682(1)250(2)	SPC10.2682(1)250A31(2)
250	160	0.10	WPI/A31	9.1	5.5	10.2	4036	1000	F127WP103(1)250(2)	SPC10.2103(1)250A31(2)
250	160	0.15	WPI/A31	9.1	5.5	10.2	4036	1000	F127WP153(1)250(2)	SPC10.2153(1)250A31(2)
250	160	0.22	WPI/A31	9.1	5.5	10.2	4036	1000	F127WP223(1)250(2)	SPC10.2223(1)250A31(2)
250	160	0.33	WPI/A31	9.1	5.5	10.2	4036	1000	F127WP333(1)250(2)	SPC10.2333(1)250A31(2)
250	160	0.47	WPI/A31	9.1	5.5	10.2	4036	1000	F127WP473(1)250(2)	SPC10.2473(1)250A31(2)
250	160	0.68	YR/B31	11.5	6.5	12.7	5045	700	F127YR683(1)250(2)	SPC12.7683(1)250B31(2)
250	160	0.10	YR/B31	11.5	6.5	12.7	5045	700	F127YR104(1)250(2)	SPC12.7104(1)250B31(2)
250	160	0.15	ZS/C31	15.0	7.0	16.5	6560	350	F127ZS154(1)250(2)	SPC16.5154(1)250C31(2)
250	160	0.22	ZS/C31	15.0	7.0	16.5	6560	350	F127ZS224(1)250(2)	SPC16.5224(1)250C31(2)
250	160	0.33	ZS/C31	15.0	7.0	16.5	6560	350	F127ZS334(1)250(2)	SPC16.5334(1)250C31(2)
400	250	0.00047	SG/K31	6.0	2.5	7.3	2824	1600	F127SG471(1)400(2)	SPC7.3471(1)400K31(2)
400	250	0.00068	SG/K31	6.0	2.5	7.3	2824	1600	F127SG681(1)400(2)	SPC7.3681(1)400K31(2)
400	250	0.0010	SG/K31	6.0	2.5	7.3	2824	1600	F127SG102(1)400(2)	SPC7.3102(1)400K31(2)
400	250	0.0015	SG/K31	6.0	2.5	7.3	2824	1600	F127SG152(1)400(2)	SPC7.3152(1)400K31(2)
400	250	0.0022	SG/K31	6.0	2.5	7.3	2824	1600	F127SG222(1)400(2)	SPC7.3222(1)400K31(2)
400	250	0.0033	SL/K33	6.0	3.0	7.3	2824	1600	F127SL332(1)400(2)	SPC7.3332(1)400K33(2)
400	250	0.0047	SP/K35	6.0	3.5	7.3	2824	1600	F127SP472(1)400(2)	SPC7.3472(1)400K35(2)
400	250	0.0068	ST/K37	6.0	4.5	7.3	2824	1600	F127ST682(1)400(2)	SPC7.3682(1)400K37(2)
400	250	0.0068	WPI/A31	9.1	5.5	10.2	4036	1300	F127WP682(1)400(2)	SPC10.2682(1)400A31(2)
400	250	0.010	WPI/A31	9.1	5.5	10.2	4036	1300	F127WP103(1)400(2)	SPC10.2103(1)400A31(2)
400	250	0.015	WPI/A31	9.1	5.5	10.2	4036	1300	F127WP153(1)400(2)	SPC10.2153(1)400A31(2)
400	250	0.022	WPI/A31	9.1	5.5	10.2	4036	1300	F127WP223(1)400(2)	SPC10.2223(1)400A31(2)
400	250	0.033	YR/B31	11.5	6.5	12.7	5045	900	F127YR333(1)400(2)	SPC12.7333(1)400B31(2)
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number

(1) $G = \pm 2\%$, $R = \pm 2.5\%$ (Legacy code = H), $J = \pm 5\%$, $K = \pm 10\%$.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

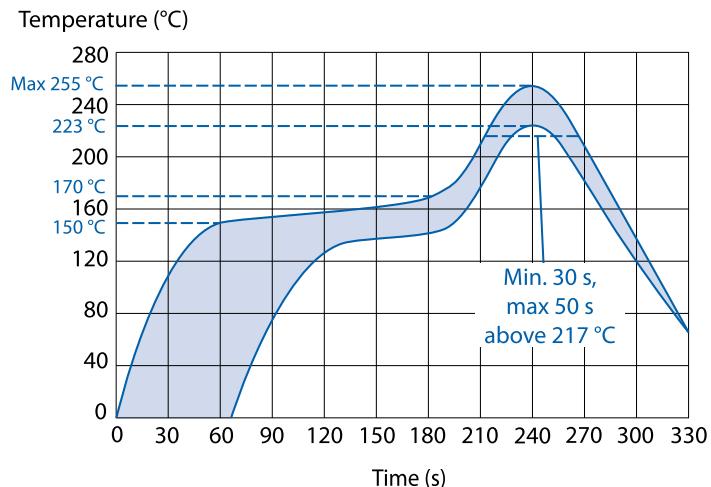
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
400	250	0.047	YR/B31	11.5	6.5	12.7	5045	900	F127YR473(1)400(2)	SPC12.7473(1)400B31(2)
400	250	0.068	ZS/C31	15.0	7.0	16.5	6560	450	F127ZS683(1)400(2)	SPC16.5683(1)400C31(2)
400	250	0.10	ZS/C31	15.0	7.0	16.5	6560	450	F127ZS104(1)400(2)	SPC16.5104(1)400C31(2)
400	250	0.15	ZS/C31	15.0	7.0	16.5	6560	450	F127ZS154(1)400(2)	SPC16.5154(1)400C31(2)
630	350	0.00047	SG/K31	6.0	2.5	7.3	2824	2000	F127SG471(1)630(2)	SPC7.3471(1)630K31(2)
630	350	0.00068	SG/K31	6.0	2.5	7.3	2824	2000	F127SG681(1)630(2)	SPC7.3681(1)630K31(2)
630	350	0.0010	SG/K31	6.0	2.5	7.3	2824	2000	F127SG102(1)630(2)	SPC7.3102(1)630K31(2)
630	350	0.0015	SG/K31	6.0	2.5	7.3	2824	2000	F127SG152(1)630(2)	SPC7.3152(1)630K31(2)
630	350	0.0022	SL/K33	6.0	3.0	7.3	2824	2000	F127SL222(1)630(2)	SPC7.3222(1)630K33(2)
630	350	0.0033	SP/K35	6.0	3.5	7.3	2824	2000	F127SP332(1)630(2)	SPC7.3332(1)630K35(2)
630	350	0.0047	ST/K37	6.0	4.5	7.3	2824	2000	F127ST472(1)630(2)	SPC7.3472(1)630K37(2)
630	350	0.0068	WP/A31	9.1	5.5	10.2	4036	1600	F127WP682(1)630(2)	SPC10.2682(1)630A31(2)
630	350	0.010	WP/A31	9.1	5.5	10.2	4036	1600	F127WP103(1)630(2)	SPC10.2103(1)630A31(2)
630	350	0.015	WP/A31	9.1	5.5	10.2	4036	1600	F127WP153(1)630(2)	SPC10.2153(1)630A31(2)
630	350	0.022	YR/B31	11.5	6.5	12.7	5045	1100	F127YR223(1)630(2)	SPC12.7223(1)630B31(2)
630	350	0.033	YR/B31	11.5	6.5	12.7	5045	1100	F127YR333(1)630(2)	SPC12.7333(1)630B31(2)
630	350	0.047	ZS/C31	15.0	7.0	16.5	6560	550	F127ZS473(1)630(2)	SPC16.5473(1)630C31(2)
630	350	0.068	ZS/C31	15.0	7.0	16.5	6560	550	F127ZS683(1)630(2)	SPC16.5683(1)630C31(2)
630	350	0.10	ZS/C31	15.0	7.0	16.5	6560	550	F127ZS104(1)630(2)	SPC16.5104(1)630C31(2)
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	B (mm)	H (mm)	L (mm)	Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number

(1) G = $\pm 2\%$, R = $\pm 2.5\%$ (Legacy code = H), J = $\pm 5\%$, K = $\pm 10\%$.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 255°C.



Marking

- Capacitance
- Capacitance tolerance code
- Rated voltage code
- Capacitor type D for SPC
- Manufacturing date code

Packaging Quantities

Chip Size (EIA)	Base (mm)	Height (mm)	Length (mm)	Bulk	Reel Horizontal Orientation	Reel Vertical Orientation
2824	6	2.5	7.3	2000	3100	
2824	6	3	7.3	2000	2500	
2824	6	3.5	7.3	2000	2300	
2824	6	4.5	7.3	1000	1700	
4036	9.1	5.5	10.2	1000	800	500
5045	11.5	6.5	12.7	1000	600	400
6560	15	7	16.5	800	500	200

Overview

Polyphenylene sulphide (PPS) film capacitor for surface mounting.

Applications

Typical applications include timing, filtering and use as a memory capacitor. The SMW Series is designed for high stability, accuracy and temperature.

Benefits

- Rated voltage: 50 – 400 VDC
- Rated voltage: 30 – 200 VAC
- Capacitance range: 0.001 – 0.56 µF
- EIA size: 2220 – 2824
- Capacitance tolerance: ±2%, ±2.5%, ±5%, ±10%
- Climatic category: 55/125/56
- RoHS Compliant and lead-free terminations
- Operating temperature range of -55°C to +125°C



Legacy Part Number System

SMW	5.7	102	K	50	J91	TR12
Series	Chip Length (mm)	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Size Code	Packaging Code
Metallized PPS	5.7 7.3	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	G = ±2% H = ±2.5% J = ±5% K = ±10%	50 100 250 400	See Dimension Table	See Ordering Options Table

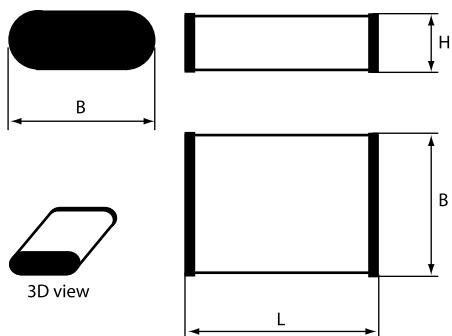
New KEMET Part Number System

F	126	P	H	102	K	050	V
Capacitor Class	Series	Chip Size	Size Code	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Packaging Code
F = Film	Metallized PPS	P = 2220 S = 2824	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	G = ±2% R = ±2.5% J = ±5% K = ±10%	050 = 50 100 = 100 250 = 250 400 = 400	See Ordering Options Table

Ordering Options Table

Packaging Type	KEMET Packaging Code	Legacy Packaging Code
Standard Lead and Packaging Options		
Tape & Reel (Standard Reel)	V	TR12
Bulk (Bag)	A	BULK

Dimensions – Millimeters



KEMET Size Code	Legacy Size Code	Chip Size (EIA)	B		H		L	
			Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
PH	J91	2220	5.0	+/-0.4	2.0	Maximum	5.7	+/-0.4
PP	J93	2220	5.0	+/-0.4	3.0	Maximum	5.7	+/-0.4
PU	J95	2220	5.0	+/-0.4	4.0	Maximum	5.7	+/-0.4
SE	K91	2824	6.0	+/-0.4	2.0	Maximum	7.3	+/-0.4
SH	K93	2824	6.0	+/-0.4	2.7	Maximum	7.3	+/-0.4
SM	K95	2824	6.0	+/-0.4	3.2	Maximum	7.3	+/-0.4
SS	K97	2824	6.0	+/-0.4	4.2	Maximum	7.3	+/-0.4

Environmental Compliance

All KEMET surface mount capacitors are RoHS Compliant.

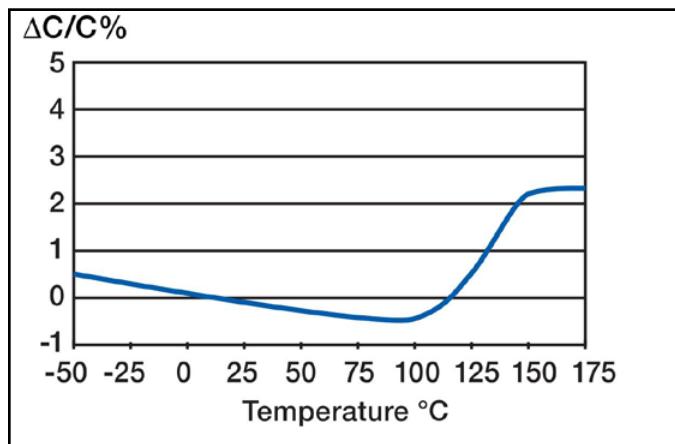


RoHS Compliant

Performance Characteristics

Rated Voltage (VDC)	50	100	250	400
Rated Voltage (VAC)	30	63	160	200
Capacitance Range (μF)	0.001 – 0.56	0.001 – 0.18	0.001 – 0.068	0.001 – 0.022
Chip Size (EIA)	2220 – 2824			
Capacitance Tolerance	$\pm 2\%$, $\pm 2.5\%$, $\pm 5\%$, $\pm 10\%$			
Category Temperature Range	-55°C to +125°C			
Rated Temperature	+100°C			
Voltage Derating	The rated voltage should be decreased with 1.25%/°C from +100°C to +125°C and 1.5%/°C from +125°C to 175°C			
Climatic Category	55/125/56			
Test Voltage	1.6 x V_R , 60 seconds			
Insulation Resistance	Measured at +20°C According to IEC 60384-20			
	Minimum Value Between Terminals			
			$C \leq 0.56 \mu\text{F}$	
	$V_R \leq 100$	15,000 MΩ		
Dissipation Factor	$V_R > 100$	30,000 MΩ		
	Maximum Values at +23°C			
			$C \leq 0.1 \mu\text{F}$	$0.1 < C \leq 0.56 \mu\text{F}$
	1 kHz	0.15%		0.15%
Pulse Rise Time	10 kHz	0.25%		0.25%
	100 kHz	0.50%		0.60%
The capacitors can withstand an unlimited number of pulses with a dV/dt according to Table 1. For voltages (V) lower than the rated voltage (V_R), the specified dV/dt can be multiplied by V_R/V .				

Capacitance vs. Temperature



Dissipation Factor vs. Temperature

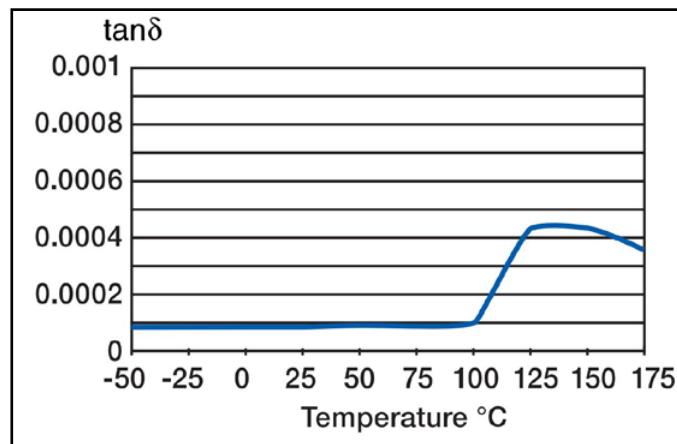


Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (μF)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.0010	PH/J91	5.0	2.0	5.7	2220	20	F126PH102(1)050(2)	SMW5.7102(1)50J91(2)
50	30	0.0012	PH/J91	5.0	2.0	5.7	2220	20	F126PH122(1)050(2)	SMW5.7122(1)50J91(2)
50	30	0.0015	PH/J91	5.0	2.0	5.7	2220	20	F126PH152(1)050(2)	SMW5.7152(1)50J91(2)
50	30	0.0018	PH/J91	5.0	2.0	5.7	2220	20	F126PH182(1)050(2)	SMW5.7182(1)50J91(2)
50	30	0.0022	PH/J91	5.0	2.0	5.7	2220	20	F126PH222(1)050(2)	SMW5.7222(1)50J91(2)
50	30	0.0027	PH/J91	5.0	2.0	5.7	2220	20	F126PH272(1)050(2)	SMW5.7272(1)50J91(2)
50	30	0.0033	PH/J91	5.0	2.0	5.7	2220	20	F126PH332(1)050(2)	SMW5.7332(1)50J91(2)
50	30	0.0039	PH/J91	5.0	2.0	5.7	2220	20	F126PH392(1)050(2)	SMW5.7392(1)50J91(2)
50	30	0.0047	PH/J91	5.0	2.0	5.7	2220	20	F126PH472(1)050(2)	SMW5.7472(1)50J91(2)
50	30	0.0056	PH/J91	5.0	2.0	5.7	2220	20	F126PH562(1)050(2)	SMW5.7562(1)50J91(2)
50	30	0.0068	PH/J91	5.0	2.0	5.7	2220	20	F126PH682(1)050(2)	SMW5.7682(1)50J91(2)
50	30	0.0082	PH/J91	5.0	2.0	5.7	2220	20	F126PH822(1)050(2)	SMW5.7822(1)50J91(2)
50	30	0.010	PH/J91	5.0	2.0	5.7	2220	20	F126PH103(1)050(2)	SMW5.7103(1)50J91(2)
50	30	0.012	PH/J91	5.0	2.0	5.7	2220	20	F126PH123(1)050(2)	SMW5.7123(1)50J91(2)
50	30	0.015	PH/J91	5.0	2.0	5.7	2220	20	F126PH153(1)050(2)	SMW5.7153(1)50J91(2)
50	30	0.018	PH/J91	5.0	2.0	5.7	2220	15	F126PH183(1)050(2)	SMW5.7183(1)50J91(2)
50	30	0.022	PH/J91	5.0	2.0	5.7	2220	15	F126PH223(1)050(2)	SMW5.7223(1)50J91(2)
50	30	0.027	PH/J91	5.0	2.0	5.7	2220	15	F126PH273(1)050(2)	SMW5.7273(1)50J91(2)
50	30	0.033	PH/J91	5.0	2.0	5.7	2220	15	F126PH333(1)050(2)	SMW5.7333(1)50J91(2)
50	30	0.039	PH/J91	5.0	2.0	5.7	2220	15	F126PH393(1)050(2)	SMW5.7393(1)50J91(2)
50	30	0.047	PH/J91	5.0	2.0	5.7	2220	15	F126PH473(1)050(2)	SMW5.7473(1)50J91(2)
50	30	0.056	PH/J91	5.0	2.0	5.7	2220	15	F126PH563(1)050(2)	SMW5.7563(1)50J91(2)
50	30	0.068	PH/J91	5.0	2.0	5.7	2220	15	F126PH683(1)050(2)	SMW5.7683(1)50J91(2)
50	30	0.082	PH/J91	5.0	2.0	5.7	2220	10	F126PH823(1)050(2)	SMW5.7823(1)50J91(2)
50	30	0.10	PH/J91	5.0	2.0	5.7	2220	10	F126PH104(1)050(2)	SMW5.7104(1)50J91(2)
50	30	0.12	PH/J91	5.0	2.0	5.7	2220	10	F126PH124(1)050(2)	SMW5.7124(1)50J91(2)
50	30	0.15	PH/J91	5.0	2.0	5.7	2220	10	F126PH154(1)050(2)	SMW5.7154(1)50J91(2)
50	30	0.18	PP/J93	5.0	3.0	5.7	2220	10	F126PP184(1)050(2)	SMW5.7184(1)50J93(2)
50	30	0.22	PP/J93	5.0	3.0	5.7	2220	10	F126PP224(1)050(2)	SMW5.7224(1)50J93(2)
50	30	0.27	PP/J93	5.0	3.0	5.7	2220	10	F126PP274(1)050(2)	SMW5.7274(1)50J93(2)
50	30	0.33	PU/J95	5.0	4.0	5.7	2220	10	F126PU334(1)050(2)	SMW5.7334(1)50J95(2)
50	30	0.0022	SE/K91	6.0	2.0	7.3	2824	20	F126SE222(1)050(2)	SMW7.3222(1)50K91(2)
50	30	0.0027	SE/K91	6.0	2.0	7.3	2824	20	F126SE272(1)050(2)	SMW7.3272(1)50K91(2)
50	30	0.0033	SE/K91	6.0	2.0	7.3	2824	20	F126SE332(1)050(2)	SMW7.3332(1)50K91(2)
50	30	0.0039	SE/K91	6.0	2.0	7.3	2824	20	F126SE392(1)050(2)	SMW7.3392(1)50K91(2)
50	30	0.0047	SE/K91	6.0	2.0	7.3	2824	20	F126SE472(1)050(2)	SMW7.3472(1)50K91(2)
50	30	0.0056	SE/K91	6.0	2.0	7.3	2824	20	F126SE562(1)050(2)	SMW7.3562(1)50K91(2)
50	30	0.0068	SE/K91	6.0	2.0	7.3	2824	20	F126SE682(1)050(2)	SMW7.3682(1)50K91(2)
50	30	0.0082	SE/K91	6.0	2.0	7.3	2824	20	F126SE822(1)050(2)	SMW7.3822(1)50K91(2)
50	30	0.010	SE/K91	6.0	2.0	7.3	2824	20	F126SE103(1)050(2)	SMW7.3103(1)50K91(2)
50	30	0.012	SE/K91	6.0	2.0	7.3	2824	20	F126SE123(1)050(2)	SMW7.3123(1)50K91(2)
50	30	0.015	SE/K91	6.0	2.0	7.3	2824	20	F126SE153(1)050(2)	SMW7.3153(1)50K91(2)
50	30	0.018	SE/K91	6.0	2.0	7.3	2824	20	F126SE183(1)050(2)	SMW7.3183(1)50K91(2)
50	30	0.022	SE/K91	6.0	2.0	7.3	2824	20	F126SE223(1)050(2)	SMW7.3223(1)50K91(2)
50	30	0.027	SE/K91	6.0	2.0	7.3	2824	15	F126SE273(1)050(2)	SMW7.3273(1)50K91(2)
50	30	0.033	SE/K91	6.0	2.0	7.3	2824	15	F126SE333(1)050(2)	SMW7.3333(1)50K91(2)
50	30	0.039	SE/K91	6.0	2.0	7.3	2824	15	F126SE393(1)050(2)	SMW7.3393(1)50K91(2)
50	30	0.047	SE/K91	6.0	2.0	7.3	2824	15	F126SE473(1)050(2)	SMW7.3473(1)50K91(2)
50	30	0.056	SE/K91	6.0	2.0	7.3	2824	15	F126SE563(1)050(2)	SMW7.3563(1)50K91(2)
50	30	0.068	SE/K91	6.0	2.0	7.3	2824	15	F126SE683(1)050(2)	SMW7.3683(1)50K91(2)
50	30	0.082	SE/K91	6.0	2.0	7.3	2824	8	F126SE823(1)050(2)	SMW7.3823(1)50K91(2)
50	30	0.10	SE/K91	6.0	2.0	7.3	2824	8	F126SE104(1)050(2)	SMW7.3104(1)50K91(2)
50	30	0.12	SE/K91	6.0	2.0	7.3	2824	8	F126SE124(1)050(2)	SMW7.3124(1)50K91(2)
50	30	0.15	SE/K91	6.0	2.0	7.3	2824	8	F126SE154(1)050(2)	SMW7.3154(1)50K91(2)
50	30	0.18	SE/K91	6.0	2.0	7.3	2824	8	F126SE184(1)050(2)	SMW7.3184(1)50K91(2)
50	30	0.22	SE/K91	6.0	2.0	7.3	2824	8	F126SE224(1)050(2)	SMW7.3224(1)50K91(2)
50	30	0.27	SE/K91	6.0	2.0	7.3	2824	8	F126SE274(1)050(2)	SMW7.3274(1)50K91(2)
50	30	0.33	SH/K93	6.0	2.7	7.3	2824	8	F126SH334(1)050(2)	SMW7.3334(1)50K93(2)
50	30	0.39	SM/K95	6.0	3.2	7.3	2824	8	F126SM394(1)050(2)	SMW7.3394(1)50K95(2)

(1) $G = \pm 2\%$, $R = \pm 2.5\%$ (Legacy code = H), $J = \pm 5\%$.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
50	30	0.47	SM/K95	6.0	3.2	7.3	2824	8	F126SM474(1)050(2)	SMW7.3474(1)50K95(2)
50	30	0.56	SS/K97	6.0	4.2	7.3	2824	8	F126SS564(1)050(2)	SMW7.3564(1)50K97(2)
100	63	0.0010	PH/J91	5.0	2.0	5.7	2220	20	F126PH102(1)100(2)	SMW5.7102(1)100J91(2)
100	63	0.0012	PH/J91	5.0	2.0	5.7	2220	20	F126PH122(1)100(2)	SMW5.7122(1)100J91(2)
100	63	0.0015	PH/J91	5.0	2.0	5.7	2220	20	F126PH152(1)100(2)	SMW5.7152(1)100J91(2)
100	63	0.0018	PH/J91	5.0	2.0	5.7	2220	20	F126PH182(1)100(2)	SMW5.7182(1)100J91(2)
100	63	0.0022	PH/J91	5.0	2.0	5.7	2220	20	F126PH222(1)100(2)	SMW5.7222(1)100J91(2)
100	63	0.0027	PH/J91	5.0	2.0	5.7	2220	20	F126PH272(1)100(2)	SMW5.7272(1)100J91(2)
100	63	0.0033	PH/J91	5.0	2.0	5.7	2220	20	F126PH332(1)100(2)	SMW5.7332(1)100J91(2)
100	63	0.0039	PH/J91	5.0	2.0	5.7	2220	20	F126PH392(1)100(2)	SMW5.7392(1)100J91(2)
100	63	0.0047	PH/J91	5.0	2.0	5.7	2220	20	F126PH472(1)100(2)	SMW5.7472(1)100J91(2)
100	63	0.0056	PH/J91	5.0	2.0	5.7	2220	20	F126PH562(1)100(2)	SMW5.7562(1)100J91(2)
100	63	0.0068	PH/J91	5.0	2.0	5.7	2220	20	F126PH682(1)100(2)	SMW5.7682(1)100J91(2)
100	63	0.0082	PH/J91	5.0	2.0	5.7	2220	20	F126PH822(1)100(2)	SMW5.7822(1)100J91(2)
100	63	0.010	PH/J91	5.0	2.0	5.7	2220	20	F126PH103(1)100(2)	SMW5.7103(1)100J91(2)
100	63	0.012	PH/J91	5.0	2.0	5.7	2220	20	F126PH123(1)100(2)	SMW5.7123(1)100J91(2)
100	63	0.015	PH/J91	5.0	2.0	5.7	2220	20	F126PH153(1)100(2)	SMW5.7153(1)100J91(2)
100	63	0.018	PH/J91	5.0	2.0	5.7	2220	15	F126PH183(1)100(2)	SMW5.7183(1)100J91(2)
100	63	0.022	PH/J91	5.0	2.0	5.7	2220	15	F126PH223(1)100(2)	SMW5.7223(1)100J91(2)
100	63	0.027	PH/J91	5.0	2.0	5.7	2220	15	F126PH273(1)100(2)	SMW5.7273(1)100J91(2)
100	63	0.033	PH/J91	5.0	2.0	5.7	2220	15	F126PH333(1)100(2)	SMW5.7333(1)100J91(2)
100	63	0.039	PH/J91	5.0	2.0	5.7	2220	15	F126PH393(1)100(2)	SMW5.7393(1)100J91(2)
100	63	0.047	PH/J91	5.0	2.0	5.7	2220	15	F126PH473(1)100(2)	SMW5.7473(1)100J91(2)
100	63	0.056	PH/J91	5.0	2.0	5.7	2220	15	F126PH563(1)100(2)	SMW5.7563(1)100J91(2)
100	63	0.068	PH/J91	5.0	2.0	5.7	2220	15	F126PH683(1)100(2)	SMW5.7683(1)100J91(2)
100	63	0.082	PP/J93	5.0	3.0	5.7	2220	15	F126PP823(1)100(2)	SMW5.7823(1)100J93(2)
100	63	0.10	PP/J93	5.0	3.0	5.7	2220	15	F126PP104(1)100(2)	SMW5.7104(1)100J93(2)
100	63	0.12	PU/J95	5.0	4.0	5.7	2220	15	F126PU124(1)100(2)	SMW5.7124(1)100J95(2)
100	63	0.15	PU/J95	5.0	4.0	5.7	2220	15	F126PU154(1)100(2)	SMW5.7154(1)100J95(2)
100	63	0.0022	SE/K91	6.0	2.0	7.3	2824	20	F126SE222(1)100(2)	SMW7.3222(1)100K91(2)
100	63	0.0027	SE/K91	6.0	2.0	7.3	2824	20	F126SE272(1)100(2)	SMW7.3272(1)100K91(2)
100	63	0.0033	SE/K91	6.0	2.0	7.3	2824	20	F126SE332(1)100(2)	SMW7.3332(1)100K91(2)
100	63	0.0039	SE/K91	6.0	2.0	7.3	2824	20	F126SE392(1)100(2)	SMW7.3392(1)100K91(2)
100	63	0.0047	SE/K91	6.0	2.0	7.3	2824	20	F126SE472(1)100(2)	SMW7.3472(1)100K91(2)
100	63	0.0056	SE/K91	6.0	2.0	7.3	2824	20	F126SE562(1)100(2)	SMW7.3562(1)100K91(2)
100	63	0.0068	SE/K91	6.0	2.0	7.3	2824	20	F126SE682(1)100(2)	SMW7.3682(1)100K91(2)
100	63	0.0082	SE/K91	6.0	2.0	7.3	2824	20	F126SE822(1)100(2)	SMW7.3822(1)100K91(2)
100	63	0.010	SE/K91	6.0	2.0	7.3	2824	20	F126SE103(1)100(2)	SMW7.3103(1)100K91(2)
100	63	0.012	SE/K91	6.0	2.0	7.3	2824	20	F126SE123(1)100(2)	SMW7.3123(1)100K91(2)
100	63	0.015	SE/K91	6.0	2.0	7.3	2824	20	F126SE153(1)100(2)	SMW7.3153(1)100K91(2)
100	63	0.018	SE/K91	6.0	2.0	7.3	2824	20	F126SE183(1)100(2)	SMW7.3183(1)100K91(2)
100	63	0.022	SE/K91	6.0	2.0	7.3	2824	20	F126SE223(1)100(2)	SMW7.3223(1)100K91(2)
100	63	0.027	SE/K91	6.0	2.0	7.3	2824	15	F126SE273(1)100(2)	SMW7.3273(1)100K91(2)
100	63	0.033	SE/K91	6.0	2.0	7.3	2824	15	F126SE333(1)100(2)	SMW7.3333(1)100K91(2)
100	63	0.039	SE/K91	6.0	2.0	7.3	2824	15	F126SE393(1)100(2)	SMW7.3393(1)100K91(2)
100	63	0.047	SE/K91	6.0	2.0	7.3	2824	15	F126SE473(1)100(2)	SMW7.3473(1)100K91(2)
100	63	0.056	SE/K91	6.0	2.0	7.3	2824	15	F126SE563(1)100(2)	SMW7.3563(1)100K91(2)
100	63	0.068	SE/K91	6.0	2.0	7.3	2824	15	F126SE683(1)100(2)	SMW7.3683(1)100K91(2)
100	63	0.082	SE/K91	6.0	2.0	7.3	2824	15	F126SE823(1)100(2)	SMW7.3823(1)100K91(2)
100	63	0.10	SH/K93	6.0	2.7	7.3	2824	15	F126SH104(1)100(2)	SMW7.3104(1)100K93(2)
100	63	0.12	SH/K93	6.0	2.7	7.3	2824	15	F126SH124(1)100(2)	SMW7.3124(1)100K93(2)
100	63	0.15	SM/K95	6.0	3.2	7.3	2824	15	F126SM154(1)100(2)	SMW7.3154(1)100K95(2)
100	63	0.18	SS/K97	6.0	4.2	7.3	2824	15	F126SS184(1)100(2)	SMW7.3184(1)100K97(2)
250	160	0.0010	PH/J91	5.0	2.0	5.7	2220	20	F126PH102(1)250(2)	SMW5.7102(1)250J91(2)
250	160	0.0012	PH/J91	5.0	2.0	5.7	2220	20	F126PH122(1)250(2)	SMW5.7122(1)250J91(2)
250	160	0.0015	PH/J91	5.0	2.0	5.7	2220	20	F126PH152(1)250(2)	SMW5.7152(1)250J91(2)
250	160	0.0018	PH/J91	5.0	2.0	5.7	2220	20	F126PH182(1)250(2)	SMW5.7182(1)250J91(2)
250	160	0.0022	PH/J91	5.0	2.0	5.7	2220	20	F126PH222(1)250(2)	SMW5.7222(1)250J91(2)
250	160	0.0027	PH/J91	5.0	2.0	5.7	2220	20	F126PH272(1)250(2)	SMW5.7272(1)250J91(2)

(1) $G = \pm 2\%$, $R = \pm 2.5\%$ (Legacy code = H), $J = \pm 5\%$.

(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Table 1 – Ratings & Part Number Reference cont'd

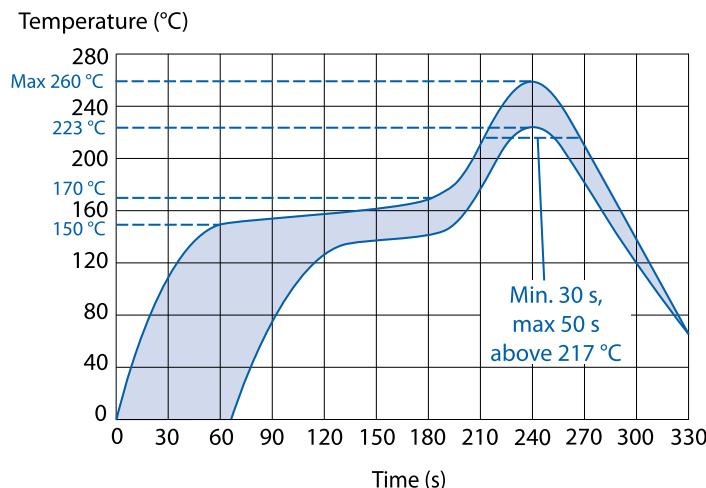
VDC	VAC	Cap Value (μ F)	Size Code (New/Legacy)	Dimensions in mm			Chip Size	dV/dt (V/ μ s)	New KEMET Part Number	Legacy Part Number
				B	H	L				
250	160	0.0033	PH/J91	5.0	2.0	5.7	2220	20	F126PH332(1)250(2)	SMW5.7332(1)250J91(2)
250	160	0.0039	PH/J91	5.0	2.0	5.7	2220	20	F126PH392(1)250(2)	SMW5.7392(1)250J91(2)
250	160	0.0047	PH/J91	5.0	2.0	5.7	2220	20	F126PH472(1)250(2)	SMW5.7472(1)250J91(2)
250	160	0.0056	PH/J91	5.0	2.0	5.7	2220	20	F126PH562(1)250(2)	SMW5.7562(1)250J91(2)
250	160	0.0068	PH/J91	5.0	2.0	5.7	2220	20	F126PH682(1)250(2)	SMW5.7682(1)250J91(2)
250	160	0.0082	PH/J91	5.0	2.0	5.7	2220	20	F126PH822(1)250(2)	SMW5.7822(1)250J91(2)
250	160	0.010	PH/J91	5.0	2.0	5.7	2220	20	F126PH103(1)250(2)	SMW5.7103(1)250J91(2)
250	160	0.012	PH/J91	5.0	2.0	5.7	2220	20	F126PH123(1)250(2)	SMW5.7123(1)250J91(2)
250	160	0.015	PH/J91	5.0	2.0	5.7	2220	20	F126PH153(1)250(2)	SMW5.7153(1)250J91(2)
250	160	0.018	PP/J93	5.0	3.0	5.7	2220	20	F126PP183(1)250(2)	SMW5.7183(1)250J93(2)
250	160	0.022	PP/J93	5.0	3.0	5.7	2220	20	F126PP223(1)250(2)	SMW5.7223(1)250J93(2)
250	160	0.027	PP/J93	5.0	3.0	5.7	2220	20	F126PP273(1)250(2)	SMW5.7273(1)250J93(2)
250	160	0.033	PU/J95	5.0	4.0	5.7	2220	20	F126PU333(1)250(2)	SMW5.7333(1)250J95(2)
250	160	0.0022	SE/K91	6.0	2.0	7.3	2824	20	F126SE222(1)250(2)	SMW7.3222(1)250K91(2)
250	160	0.0027	SE/K91	6.0	2.0	7.3	2824	20	F126SE272(1)250(2)	SMW7.3272(1)250K91(2)
250	160	0.0033	SE/K91	6.0	2.0	7.3	2824	20	F126SE332(1)250(2)	SMW7.3332(1)250K91(2)
250	160	0.0039	SE/K91	6.0	2.0	7.3	2824	20	F126SE392(1)250(2)	SMW7.3392(1)250K91(2)
250	160	0.0047	SE/K91	6.0	2.0	7.3	2824	20	F126SE472(1)250(2)	SMW7.3472(1)250K91(2)
250	160	0.0056	SE/K91	6.0	2.0	7.3	2824	20	F126SE562(1)250(2)	SMW7.3562(1)250K91(2)
250	160	0.0068	SE/K91	6.0	2.0	7.3	2824	20	F126SE682(1)250(2)	SMW7.3682(1)250K91(2)
250	160	0.0082	SE/K91	6.0	2.0	7.3	2824	20	F126SE822(1)250(2)	SMW7.3822(1)250K91(2)
250	160	0.010	SE/K91	6.0	2.0	7.3	2824	20	F126SE103(1)250(2)	SMW7.3103(1)250K91(2)
250	160	0.012	SE/K91	6.0	2.0	7.3	2824	20	F126SE123(1)250(2)	SMW7.3123(1)250K91(2)
250	160	0.015	SE/K91	6.0	2.0	7.3	2824	20	F126SE153(1)250(2)	SMW7.3153(1)250K91(2)
250	160	0.018	SE/K91	6.0	2.0	7.3	2824	20	F126SE183(1)250(2)	SMW7.3183(1)250K91(2)
250	160	0.022	SE/K91	6.0	2.0	7.3	2824	20	F126SE223(1)250(2)	SMW7.3223(1)250K91(2)
250	160	0.027	SE/K91	6.0	2.0	7.3	2824	15	F126SE273(1)250(2)	SMW7.3273(1)250K91(2)
250	160	0.033	SH/K93	6.0	2.7	7.3	2824	15	F126SH333(1)250(2)	SMW7.3333(1)250K93(2)
250	160	0.039	SH/K93	6.0	2.7	7.3	2824	15	F126SH393(1)250(2)	SMW7.3393(1)250K93(2)
250	160	0.047	SM/K95	6.0	3.2	7.3	2824	15	F126SM473(1)250(2)	SMW7.3473(1)250K95(2)
250	160	0.056	SS/K97	6.0	4.2	7.3	2824	15	F126SS563(1)250(2)	SMW7.3563(1)250K97(2)
250	160	0.068	SS/K97	6.0	4.2	7.3	2824	15	F126SS683(1)250(2)	SMW7.3683(1)250K97(2)
400	200	0.0010	PH/J91	5.0	2.0	5.7	2220	20	F126PH102(1)400(2)	SMW5.7102(1)400J91(2)
400	200	0.0012	PH/J91	5.0	2.0	5.7	2220	20	F126PH122(1)400(2)	SMW5.7122(1)400J91(2)
400	200	0.0015	PH/J91	5.0	2.0	5.7	2220	20	F126PH152(1)400(2)	SMW5.7152(1)400J91(2)
400	200	0.0018	PH/J91	5.0	2.0	5.7	2220	20	F126PH182(1)400(2)	SMW5.7182(1)400J91(2)
400	200	0.0022	PH/J91	5.0	2.0	5.7	2220	20	F126PH222(1)400(2)	SMW5.7222(1)400J91(2)
400	200	0.0027	PH/J91	5.0	2.0	5.7	2220	20	F126PH272(1)400(2)	SMW5.7272(1)400J91(2)
400	200	0.0033	PH/J91	5.0	2.0	5.7	2220	20	F126PH332(1)400(2)	SMW5.7332(1)400J91(2)
400	200	0.0039	PH/J91	5.0	2.0	5.7	2220	20	F126PH392(1)400(2)	SMW5.7392(1)400J91(2)
400	200	0.0047	PH/J91	5.0	2.0	5.7	2220	20	F126PH472(1)400(2)	SMW5.7472(1)400J91(2)
400	200	0.0056	PP/J93	5.0	3.0	5.7	2220	20	F126PP562(1)400(2)	SMW5.7562(1)400J93(2)
400	200	0.0068	PP/J93	5.0	3.0	5.7	2220	20	F126PP682(1)400(2)	SMW5.7682(1)400J93(2)
400	200	0.0082	PP/J93	5.0	3.0	5.7	2220	20	F126PP822(1)400(2)	SMW5.7822(1)400J93(2)
400	200	0.010	PP/J93	5.0	3.0	5.7	2220	20	F126PP103(1)400(2)	SMW5.7103(1)400J93(2)
400	200	0.012	PU/J95	5.0	4.0	5.7	2220	20	F126PU123(1)400(2)	SMW5.7123(1)400J95(2)
400	200	0.015	PU/J95	5.0	4.0	5.7	2220	20	F126PU153(1)400(2)	SMW5.7153(1)400J95(2)
400	200	0.0022	SE/K91	6.0	2.0	7.3	2824	20	F126SE222(1)400(2)	SMW7.3222(1)400K91(2)
400	200	0.0027	SE/K91	6.0	2.0	7.3	2824	20	F126SE272(1)400(2)	SMW7.3272(1)400K91(2)
400	200	0.0033	SE/K91	6.0	2.0	7.3	2824	20	F126SE322(1)400(2)	SMW7.3322(1)400K91(2)
400	200	0.0039	SE/K91	6.0	2.0	7.3	2824	20	F126SE392(1)400(2)	SMW7.3392(1)400K91(2)
400	200	0.0047	SE/K91	6.0	2.0	7.3	2824	20	F126SE472(1)400(2)	SMW7.3472(1)400K91(2)
400	200	0.0056	SE/K91	6.0	2.0	7.3	2824	20	F126SE562(1)400(2)	SMW7.3562(1)400K91(2)
400	200	0.0068	SE/K91	6.0	2.0	7.3	2824	20	F126SE682(1)400(2)	SMW7.3682(1)400K91(2)
400	200	0.0082	SE/K91	6.0	2.0	7.3	2824	20	F126SE822(1)400(2)	SMW7.3822(1)400K91(2)
400	200	0.010	SE/K91	6.0	2.0	7.3	2824	20	F126SE103(1)400(2)	SMW7.3103(1)400K91(2)
400	200	0.012	SH/K93	6.0	2.7	7.3	2824	20	F126SH123(1)400(2)	SMW7.3123(1)400K93(2)
400	200	0.015	SH/K93	6.0	2.7	7.3	2824	20	F126SH153(1)400(2)	SMW7.3153(1)400K93(2)
400	200	0.018	SM/K95	6.0	3.2	7.3	2824	20	F126SM183(1)400(2)	SMW7.3183(1)400K95(2)
400	200	0.022	SM/K95	6.0	3.2	7.3	2824	20	F126SM223(1)400(2)	SMW7.3223(1)400K95(2)

(1) $G = \pm 2\%$, $R = \pm 2.5\%$ (Legacy code = H), $J = \pm 5\%$.

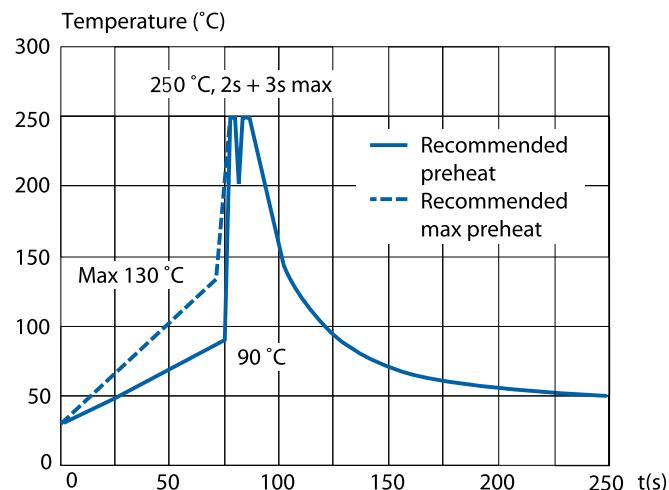
(2) Insert ordering code for lead type and packaging. See Ordering Options Table for available options.

Soldering Process

Reflow soldering temperature is measured on the top body surface of the component. Preheating temperature should be less than 170°C. The time above 217°C should be less than 50 seconds. The peak temperature must not exceed 260°C.



Wave soldering: The recommended preheating temperature is 90°C (130°C maximum). The peak temperature 250°C may be applied for 2 – 5 seconds maximum. KEMET recommends wave soldering for parts with up to 2 mm height.



Marking

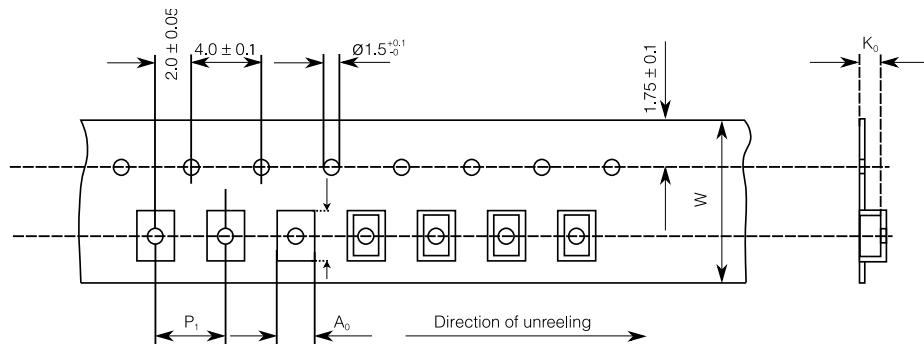
- Capacitance
- Capacitance tolerance code
- Rated voltage code
- Capacitor type S for SMW
- Manufacturing date code

Packaging Quantities

Chip Size (EIA)	Base (mm)	Height (mm)	Length (mm)	Bulk	Reel Horizontal Orientation
2220	5.0	2.0	5.7	2000	3100
2220	5.0	3.0	5.7	2000	2400
2220	5.0	4.0	5.7	2000	2100
2824	6.0	2.0	7.3	2000	3100
2824	6.0	2.7	7.3	2000	2500
2824	6.0	3.2	7.3	2000	2300
2824	6.0	4.2	7.3	1000	1700

Carrier Taping & Packaging (IEC 60286-2)

Horizontal Taping Orientation



Chip Size (EIA) Horizontal Mounting	Dimensions in mm			Taping Specification							
	B	H	L	W	P ₁	A ₀	B ₀	K ₀	D	W ₁	W ₂
	Nominal	Nominal	Nominal	-0/+0.3	+/-0.1	Nominal	Nominal	Nominal	-/+2.0	-0/+2	Maximum
2220	5.0	2.0	5.7	12.0	8.0	5.5	6.0	2.8	330	12.4	22.0
2220	5.0	3.0	5.7	12.0	8.0	5.5	6.0	3.3	330	12.4	22.0
2220	5.0	4.0	5.7	12.0	8.0	5.5	6.0	4.3	330	12.4	22.0
2824	6.0	2.0	7.3	12.0	8.0	6.5	7.5	2.8	330	12.4	22.0
2824	6.0	2.7	7.3	12.0	8.0	6.5	7.5	3.3	330	12.4	22.0
2824	6.0	3.2	7.3	12.0	8.0	6.5	7.5	3.8	330	12.4	22.0
2824	6.0	4.2	7.3	12.0	8.0	6.5	7.5	4.8	330	12.4	22.0

SMP253 Series Metallized Impregnated Paper, Class Y2, 250 VAC, Surface Mount Device

Overview

The SMP253 Series is constructed of multilayer metallized paper, encapsulated and impregnated in self-extinguishing material meeting the requirements of UL 94 V-0.

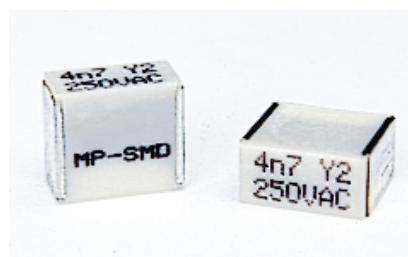
Applications

Typical applications include worldwide use as electromagnetic interference suppressor in all Y2 applications, line-to-earth.

Benefits

- Approvals: S, UL, CSA
- Rated voltage: 250 VAC 50/60 Hz
- Capacitance range: 0.001 – 0.0047 µF
- Size code: 5045, 12.7 mm
- Capacitance tolerance: ±20%
- Climatic category: 40/100/56/B, IEC 60068-1
- Tape and reel packaging in accordance with IEC 60286-3
- RoHS Compliant and lead-free terminations
- Operating temperature range of -40°C to +100°C
- 100% screening factory test at 3,000 VDC
- Highest possible safety regarding active and passive flammability

- Excellent self-healing properties ensure long life even when subjected to frequent over voltages
- Good resistance to ionization due to impregnated dielectric
- High dV/dt capability
- Impregnated paper ensures excellent stability and reliability properties, particularly in applications with continuous operation



Legacy Part Number System

SMP253	M	A	4100	M	TR24
Series	Rated Voltage (VAC)	Chip Length (mm)	Capacitance Code (pF)	Capacitance Tolerance	Lead and Packaging Code
Y2, Metallized Paper	M = 250	A = 12.7	Digits 2 – 4(3) indicates the first three digits of the capacitance value. First digit indicates the total number of digits in the capacitance value.	M = ±20%	See Ordering Options Table

New KEMET Part Number System

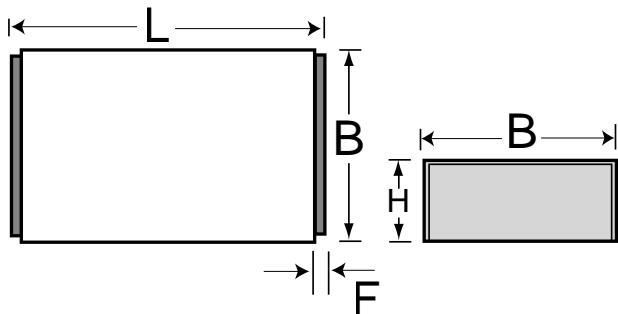
P	101	AA	102	M	250	V
Capacitor Class	Series	Chip Size	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VAC)	Lead and Packaging Code
P = Paper	Y2, Metallized Paper	See Dimension Table	First two digits indicate the two most significant digits of the capacitance value in picofarads. The third digit is the number of following zeros.	M = ±20%	250 = 250	See Ordering Options Table

One world. One KEMET

Ordering Options Table

Packaging Type	KEMET Lead and Packaging Code	Legacy Lead and Packaging Code
Standard Lead and Packaging Options		
Tape & Reel (Standard Reel)	V	TR24
Bulk (Bag)	A	BULK
Other Lead and Packaging Options		
Tape & Reel (Vertical Orientation Standard Reel)	Y	TV24

Dimensions – Millimeters



Chip Size	B		H		L		F	
EIA	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
5045	11.5	+/-0.2	6.5	+/-0.2	12.7	+/-0.2	0.5	Nominal

Performance Characteristics

Rated Voltage	250 VAC 50/60 Hz	
Capacitance Range	0.001 – 0.0047 µF	
Capacitance Tolerance	±20%	
Temperature Range	-40°C to +100°C	
Climatic Category	40/100/56/B	
Approvals	S, UL, CSA	
Dissipation Factor	Maximum Values at +23°C	
	1 kHz	1.3%
Test Voltage Between Terminals	The 100% screening factory test is carried out at 3,000 VDC. The voltage level is selected to meet the requirements in applicable equipment standards. All electrical characteristics are checked after the test. It is not permitted to repeat this test as there is a risk to damage the capacitor. KEMET is not liable in such case for any failures.	
Insulation Resistance	Minimum Value Between Terminals ≥ 12,000 MΩ	

Environmental Test Data

Test	IEC Publication	Procedure
Vibration	IEC 60068–2–6 Test Fc	3 directions at 2 hours each 10 – 500 Hz at 0.75 mm or 98 m/s ²
Active Flammability	IEC 60384–14	
Passive Flammability	IEC 60384–14	Needle-flame test
Humidity	IEC 60068–2–3 Test Ca	+40°C and 90 – 95% RH

Approvals

Mark	Specification	File Number
	EN/IEC 60384–14	9949069/01
	UL 1283 (250 VAC)	E100117
	CSA – C22.2 No. 8 (250 VAC)	E100117

Environmental Compliance

All KEMET EMI capacitors are RoHS Compliant.



RoHS Compliant

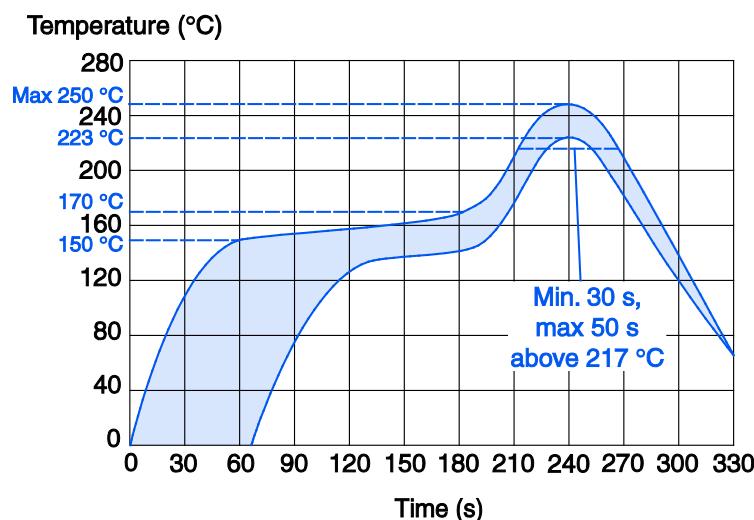
Table 1 – Ratings & Part Number Reference

Capacitance Value (μF)	Maximum Dimensions in mm			dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number
	B	H	L			
0.0010	11.5	6.5	12.7	2000	P101AA102M250(1)	SMP253MA4100M(1)
0.0015	11.5	6.5	12.7	2000	P101AA152M250(1)	SMP253MA4150M(1)
0.0022	11.5	6.5	12.7	2000	P101AA222M250(1)	SMP253MA4220M(1)
0.0025	11.5	6.5	12.7	2000	P101AA252M250(1)	SMP253MA4250M(1)
0.0033	11.5	6.5	12.7	2000	P101AA332M250(1)	SMP253MA4330M(1)
0.0039	11.5	6.5	12.7	2000	P101AA392M250(1)	SMP253MA4390M(1)
0.0047	11.5	6.5	12.7	2000	P101AA472M250(1)	SMP253MA4470M(1)
Capacitance Value (μF)	B (mm)	H (mm)	L (mm)	dV/dt (V/ μs)	New KEMET Part Number	Legacy Part Number

(1) Insert packaging code. See Ordering Options Table for available options.

Soldering Process

Reflow soldering temperature shall be measured on the top body surface of the component. The profiles herewith are recommended soldering profiles for convection reflow ovens and IR reflow ovens. If vapor phase reflow oven is used, please consult KEMET. Exceeding the manufacturer's process recommendations may harm the component. KEMET is not liable for any defect caused by exceeding recommendations. According to international standards, the maximum temperature capability shall be measured on the top surface of a component. The international standards do not define how the thermocouple should be fastened on the component. Our recommendation for attaching the thermocouple on the top surface of the component is to glue it with high temperature resistant glue.



Marking

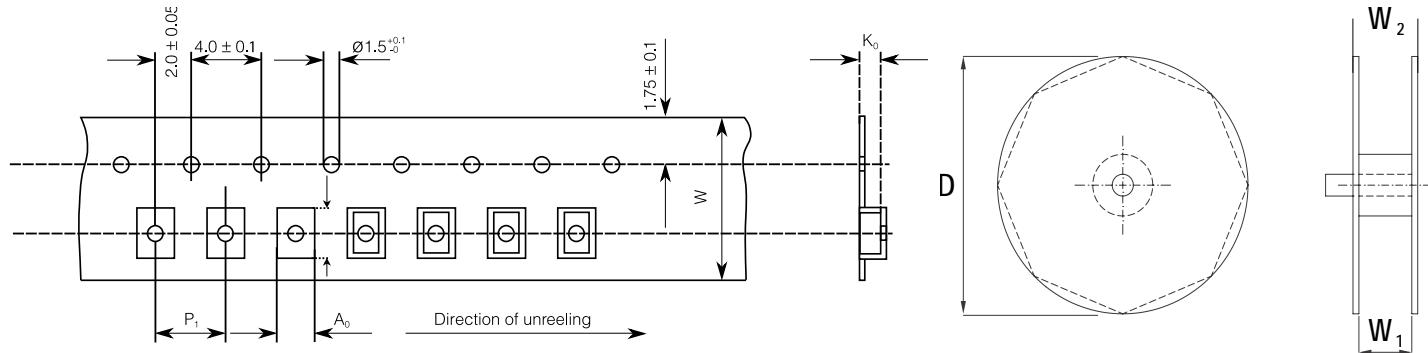
- KEMET's logo
- Series
- Capacitance
- Rated voltage
- Capacitor class
- Manufacturing date code

Packaging Quantities

Chip Size EIA	Thickness (mm)	Height (mm)	Length (mm)	Standard Reel ø 330 mm	
				Horizontal Orientation	Vertical Orientation
5045	11.5	6.5	12.7	600	400

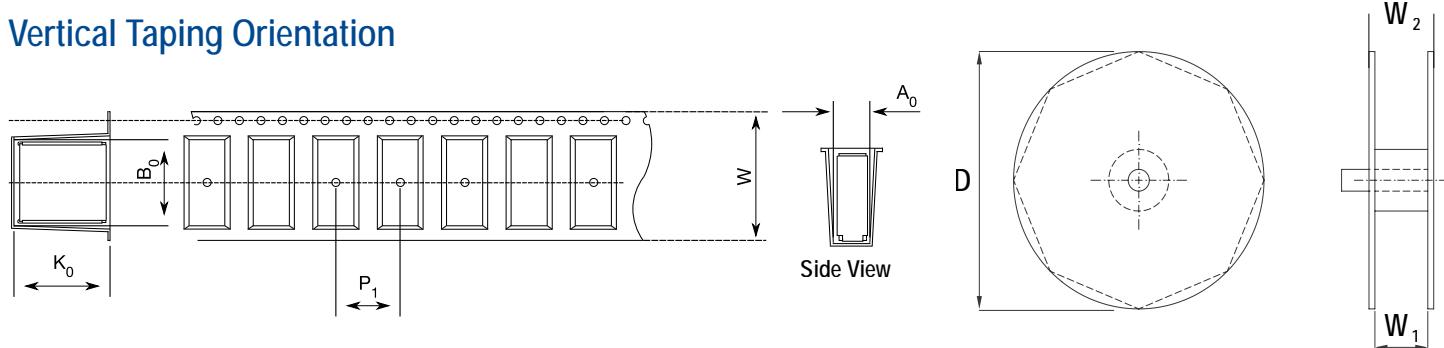
Carrier Taping & Packaging (IEC 60286-2)

Horizontal Taping Orientation



EIA Size Code Horizontal Mounting	Dimensions in mm			Taping Specification							
	B	H	L	W	P ₁	A ₀	B ₀	K ₀	D	W ₁	W ₂
	Nominal	Nominal	Nominal	-0/+0.3	+/-0.1	Nominal	Nominal	Nominal	-/+2.0	-0/+2	Maximum
5045	11.5	6.5	12.7	24.0	16.0	11.9	13.1	6.8	330	24.4	30.0

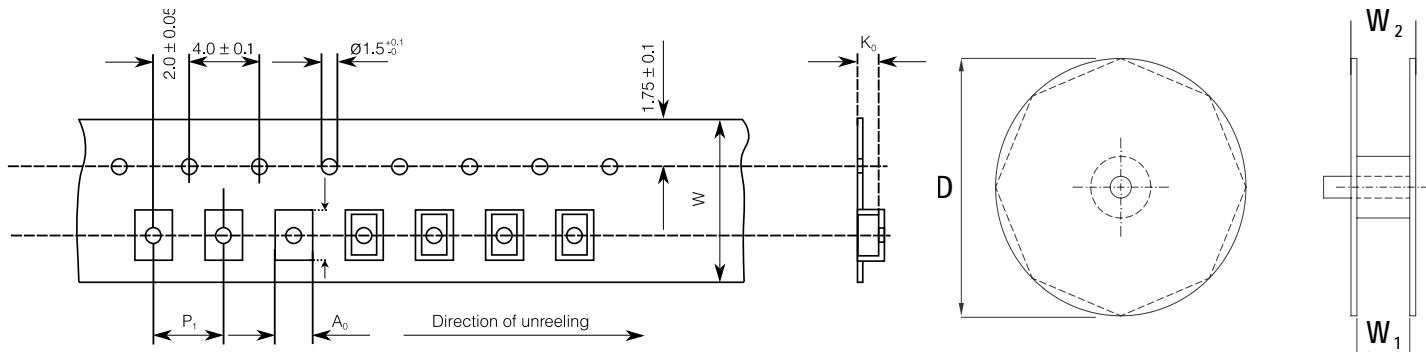
Vertical Taping Orientation



EIA Size Code Vertical Mounting	Dimensions in mm			Taping Specification							
	B	H	L	W	P ₁	A ₀	B ₀	K ₀	D	W ₁	W ₂
	Nominal	Nominal	Nominal	-0/+0.3	+/-0.1	Nominal	Nominal	Nominal	-/+2.0	-0/+2	Maximum
5026 (5045)	12.7	6.5	11.5	24.0	16.0	6.9	13.1	11.8	330	24.4	30.0

Carrier Taping & Packaging for MMC, GMC, GPC, SMC & SPC (IEC 60286-2)

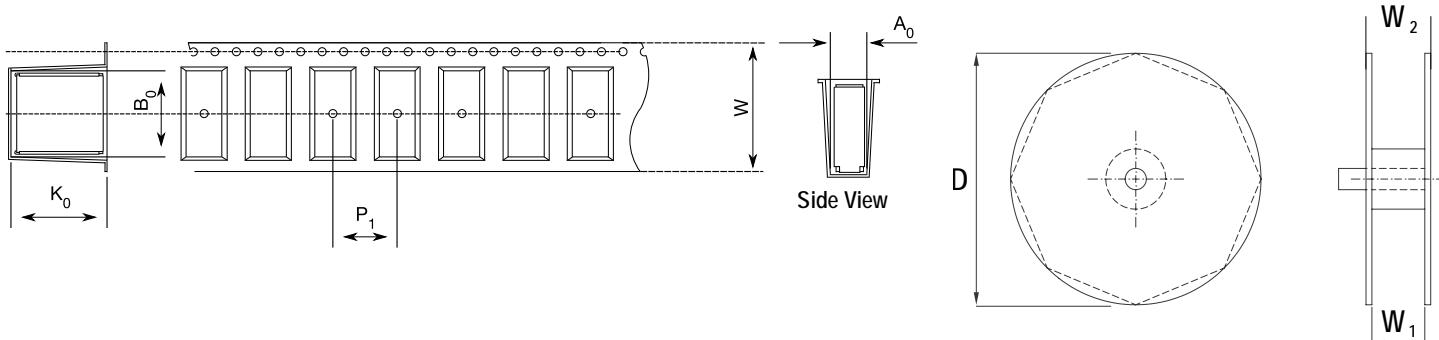
Horizontal Taping Orientation



EIA Size Code Horizontal Mounting	Dimensions in mm			Taping Specification							
	B	H	L	W	P ₁	A ₀	B ₀	K ₀	D	W ₁	W ₂
	Nominal	Nominal	Nominal	-0/+0.3	+/-0.1	Nominal	Nominal	Nominal	-/+2.0	-0/+2	Maximum
2220	5.0	2.5	5.7	12.0	8.0	5.5	6.0	2.8	330	12.4	22.0
2220	5.0	3.0	5.7	12.0	8.0	5.5	6.0	3.3	330	12.4	22.0
2220	5.0	4.0	5.7	12.0	8.0	5.5	6.0	4.3	330	12.4	22.0
2824	6.0	2.5	7.3	12.0	8.0	6.5	7.5	2.8	330	12.4	22.0
2824	6.0	3.0	7.3	12.0	8.0	6.5	7.5	3.3	330	12.4	22.0
2824	6.0	3.5	7.3	12.0	8.0	6.5	7.5	3.8	330	12.4	22.0
2824	6.0	4.5	7.3	12.0	8.0	6.5	7.5	4.8	330	12.4	22.0
4036	9.1	5.5	10.2	16.0	16.0	9.5	10.5	5.8	330	16.4	22.0
5045	11.5	6.5	12.7	24.0	16.0	11.9	13.1	6.8	330	24.4	30.0
6560	15.0	7.0	16.5	24.0	20.0	15.4	16.8	7.3	330	24.4	30.0

Carrier Taping & Packaging for MMC, GMC, GPC, SMC & SPC (IEC 60286-2) cont'd

Vertical Taping Orientation



Size Code Vertical Mounting	Dimensions in mm			Taping Specification							
	B	H	L	W	P ₁	A ₀	B ₀	K ₀	D	W ₁	W ₂
	Nominal	Nominal	Nominal	-0/+0.3	+/-0.1	Nominal	Nominal	Nominal	-/+2.0	-0/+2	Maximum
4022	5.5	9.1	10.2	24.0	16.0	6.0	10.5	9.3	330	24.4	30.0
5026	6.5	11.5	12.7	24.0	16.0	6.9	13.1	11.8	330	24.4	30.0
6528	7.0	15.0	16.5	44.0	20.0	7.5	17.0	15.3	330	44.5	49.5

Note: Chip dimensions B and H correspond to dimensions H and B in the horizontal mounting table.

KEMET Corporation World Headquarters

2835 KEMET Way
Simpsonville, SC 29681

Mailing Address:
P.O. Box 5928
Greenville, SC 29606

www.kemet.com
Tel: 864-963-6300
Fax: 864-963-6521

Corporate Offices
Fort Lauderdale, FL
Tel: 954-766-2800

North America

Southeast
Lake Mary, FL
Tel: 407-855-8886

Northeast
Wilmington, MA
Tel: 978-658-1663

Central
Novi, MI
Tel: 248-994-1030

West
Milpitas, CA
Tel: 408-433-9950

Mexico
Guadalajara, Jalisco
Tel: 52-33-3123-2141

Europe

Southern Europe
Paris, France
Tel: 33-1-4646-1006

Sasso Marconi, Italy
Tel: 39-051-939111

Central Europe
Landsberg, Germany
Tel: 49-8191-3350800

Kamen, Germany
Tel: 49-2307-438110

Northern Europe
Bishop's Stortford, United Kingdom
Tel: 44-1279-460122

Espoo, Finland
Tel: 358-9-5406-5000

Asia

Northeast Asia
Hong Kong
Tel: 852-2305-1168

Shenzhen, China
Tel: 86-755-2518-1306

Beijing, China
Tel: 86-10-5829-1711

Shanghai, China
Tel: 86-21-6447-0707

Taipei, Taiwan
Tel: 886-2-27528585

Southeast Asia
Singapore
Tel: 65-6586-1900

Penang, Malaysia
Tel: 60-4-6430200

Bangalore, India
Tel: 91-806-53-76817

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Other KEMET Resources

Tools	
Resource	Location
Configure A Part: CapEdge	http://capacitoredge.kemet.com
SPICE & FIT Software	http://www.kemet.com/spice
Search Our FAQs: KnowledgeEdge	http://www.kemet.com/keask

Product Information	
Resource	Location
Products	http://www.kemet.com/products
Technical Resources (Including Soldering Techniques)	http://www.kemet.com/technicalpapers
RoHS Statement	http://www.kemet.com/rohs
Quality Documents	http://www.kemet.com/qualitydocuments

Product Request	
Resource	Location
Sample Request	http://www.kemet.com/sample
Engineering Kit Request	http://www.kemet.com/kits

Contact	
Resource	Location
Website	www.kemet.com
Contact Us	http://www.kemet.com/contact
Investor Relations	http://www.kemet.com/ir
Call Us	1-877-MyKEMET
Twitter	http://twitter.com/kemetcapacitors

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Although we design and manufacture our products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage.

Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated or that other measures may not be required.

Product & Process Design

Sales & Marketing

Supplier

Material Management

Quality

Manufacturing

Logistics & Distribution

People: Leadership
& Development

KEMET Production System

Corporate Offices

KEMET Corporation
2835 KEMET Way
Simpsonville, SC 29681
USA
Tel: 864.963.6300
Fax: 864.963.6521

KEMET Electronics S.A.
15bis chemin des Mines
1202 Geneva
Switzerland
Tel: 41.22.715.0100
Fax: 41.22.715.0170

KEMET Electronics Marketing (S) Pte Ltd.
73 Bukit Timah Road
#05-01 Rex House
Singapore 229832
Tel: 65.6586.1900
Fax: 65.6586.1901

www.kemet.com