

R71 Series Single Metallized Polypropylene Film, Optimized for SMPS PFC Applications

Overview

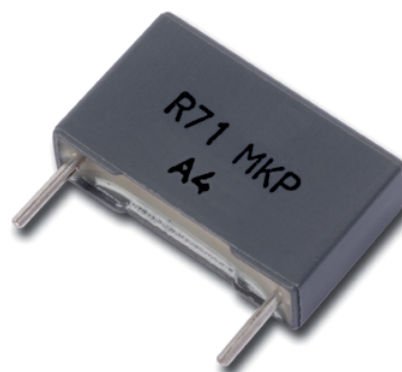
The R71 Series is a metallized polypropylene film encapsulated with self-extinguishing resin in a box of material meeting the requirements of UL 94 V-0.

Applications

Typical applications include power factor correction and pulse applications.

Benefits

- Rated voltage: 420 – 1,000 VDC
- Rated voltage: 220 – 275 VAC
- Capacitance range: 0.01 – 22 μ F
- Lead spacing: 10 – 37.5 mm
- Capacitance tolerance: $\pm 5\%$, $\pm 10\%$, $\pm 20\%$
- Climatic category: 40/110/56, IEC 60068-1
- Tape and reel packaging in accordance with IEC 60286-2
- RoHS Compliant and lead-free terminations
- Category temperature range of -40°C to +110°C



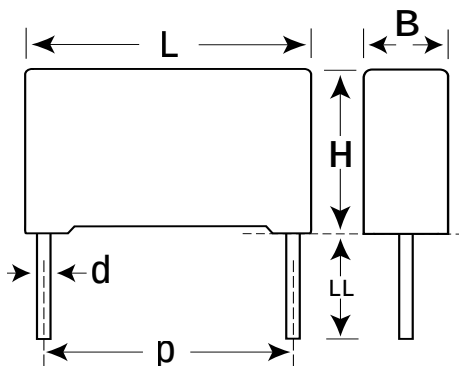
Part Number System

R71	M	F	2100	AA	00	J
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Lead and Packaging Code	Internal Use	Capacitance Tolerance
Metallized Polypropylene	M = 420 V = 520 P = 630 Q = 1,000	F = 10.0 I = 15.0 N = 22.5 R = 27.5 W = 37.5	Digits 2 – 4 indicate the first three digits of the capacitance value. First digit indicates the number of zeros to be added.	See Ordering Options Table	00, 10, 20, 30, 40 (Standard)	J = $\pm 5\%$ K = $\pm 10\%$ M = $\pm 20\%$

Ordering Options Table

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
10	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H ₀ = 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Standard Reel)	H ₀ = 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H ₀ = 18.5 +/-0.5	CK
15	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H ₀ = 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Bag) – Long Leads	25 +2/-1	50
	Bulk (Bag) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Standard Reel)	H ₀ = 18.5 +/-0.5	GY
	Tape & Reel (Large Reel)	H ₀ = 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
22.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	AA
	Ammo Pack	H ₀ = 18.5 +/-0.5	DQ
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H ₀ = 18.5 +/-0.5	CK
	Pizza Pack	4 +2/-0	BB
27.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Straight Leads	4 +2/-0	AA
	Other Lead and Packaging Options		
	Bulk (Tray) – Long Leads	25 +2/-1	50
	Bulk (Tray) – Max Length Leads	30 +5/-0	40
	Tape & Reel (Large Reel)	H ₀ = 18.5 +/-0.5	CK
37.5	Standard Lead and Packaging Options		
	Tray– Short Leads	4 +2/-0	0
	Other Lead and Packaging Options		
	Tray– Long Leads	25 +2/-1	50
	Tray– Max Length Leads	30 +5/-0	40

Dimensions – Millimeters



p		B		H		L		d	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
10	+/-0.4	4	+0.2/-0	9	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
10	+/-0.4	5	+0.2/-0	11	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
10	+/-0.4	6	+0.2/-0	12	+0.1/-0	13	+0.2/-0	0.6	+/-0.05
15	+/-0.4	5	+0.2/-0	11	+0.1/-0	18	+0.3/-0	0.6	+/-0.05
15	+/-0.4	6	+0.2/-0	12	+0.1/-0	18	+0.3/-0	0.6	+/-0.05
15	+/-0.4	6	+0.2/-0	17.5	+0.1/-0	18	+0.3/-0	0.6	+/-0.05
15	+/-0.4	7.5	+0.2/-0	13.5	+0.1/-0	18	+0.5/-0	0.6	+/-0.05
15	+/-0.4	7.5	+0.2/-0	18.5	+0.1/-0	18	+0.5/-0	0.6	+/-0.05
15	+/-0.4	8.5	+0.2/-0	14.5	+0.1/-0	18	+0.5/-0	0.6	+/-0.05
15	+/-0.4	9	+0.2/-0	12.5	+0.1/-0	18	+0.5/-0	0.6	+/-0.05
15	+/-0.4	10	+0.2/-0	16	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	11	+0.2/-0	19	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
15	+/-0.4	13	+0.2/-0	12	+0.1/-0	18	+0.5/-0	0.8	+/-0.05
22.5	+/-0.4	6	+0.2/-0	15	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	7	+0.2/-0	16	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	10	+0.2/-0	18.5	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	13	+0.2/-0	22	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
22.5	+/-0.4	8.5	+0.2/-0	17	+0.1/-0	26.5	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	9	+0.2/-0	17	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	11	+0.2/-0	20	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	13	+0.2/-0	22	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	13	+0.2/-0	25	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	14	+0.2/-0	28	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	18	+0.2/-0	33	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
27.5	+/-0.4	22	+0.2/-0	37	+0.1/-0	32	+0.3/-0	0.8	+/-0.05
37.5	+/-0.4	13	+0.3/-0	24	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	16	+0.3/-0	28.5	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	19	+0.3/-0	32	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	20	+0.3/-0	40	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	24	+0.3/-0	44	+0.1/-0	41.5	+0.3/-0	1	+/-0.05
37.5	+/-0.4	30	+0.3/-0	45	+0.1/-0	41.5	+0.3/-0	1	+/-0.05

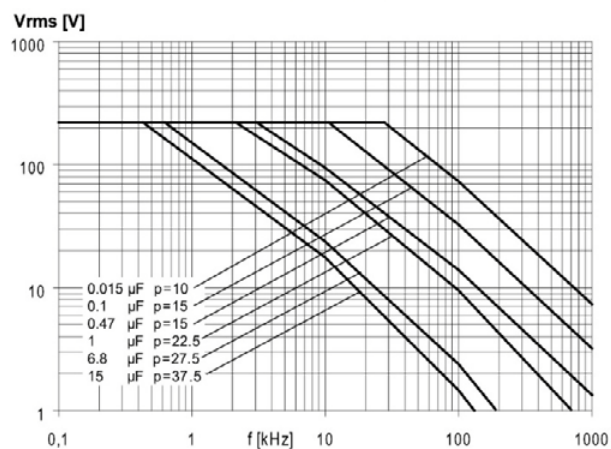
Note: See Ordering Options Table for lead length (LL) options.

Performance Characteristics

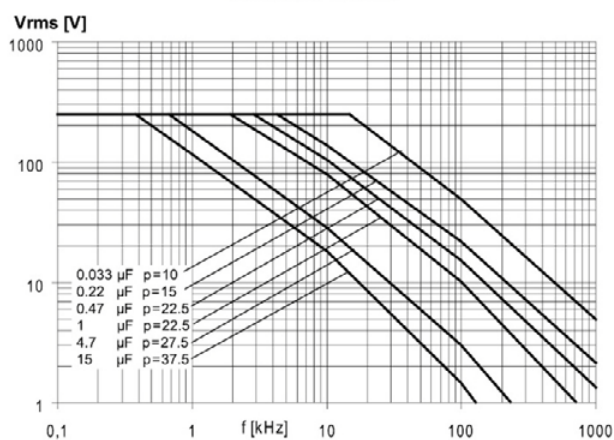
Voltage Range (VDC)	420	520	630	1000		
Voltage Range (VAC)	220	250	275	275		
Capacitance Range (μF)	0.015 – 22	0.01 – 22	0.01 – 15	0.22 – 8.2		
Capacitance Values	IEC E12 values available on request					
Capacitance Tolerance	±5%, ±10%, ±20%					
Category Temperature Range	-55°C to +110°C					
Voltage Derating	The rated voltage is decreased with 4%/°C between +105°C and +110°C					
Climatic Category	IIEC 60068–1, 55/110/56					
Self-Inductance L (Lead Length ~ 2 mm)	Lead Space (mm)	10	15	22.5	27.5	37.5
	L (nH) ≈	9	10	18	18	20
Dissipation Factor tanδ	Typical value at 25°C ±5°C					
	1 kHz			0.001		
Insulation Resistance	Typical value at +25°C, 100 VDC 60 seconds					
	Minimum Values Between Terminals					
	C ≤ 0.33 μF			≥ 100,000 MΩ		
	C > 0.33 μF			≥ 30,000 MΩ • μF		
Test Voltage Between Terminals	1.6 x V _R applied for 2 seconds at 25°C ±5°C					

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

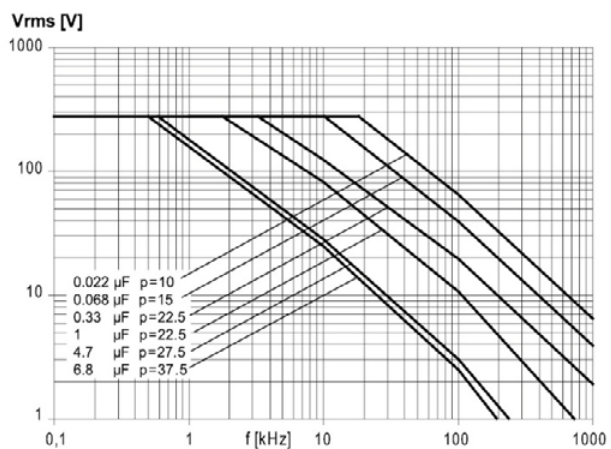
420Vdc / 220Vac



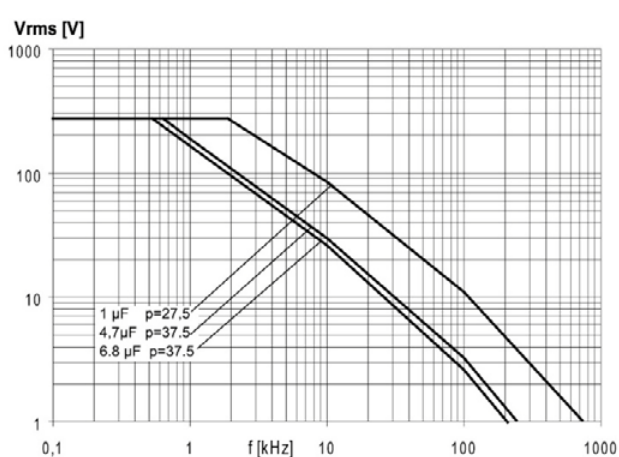
520Vdc / 250Vac



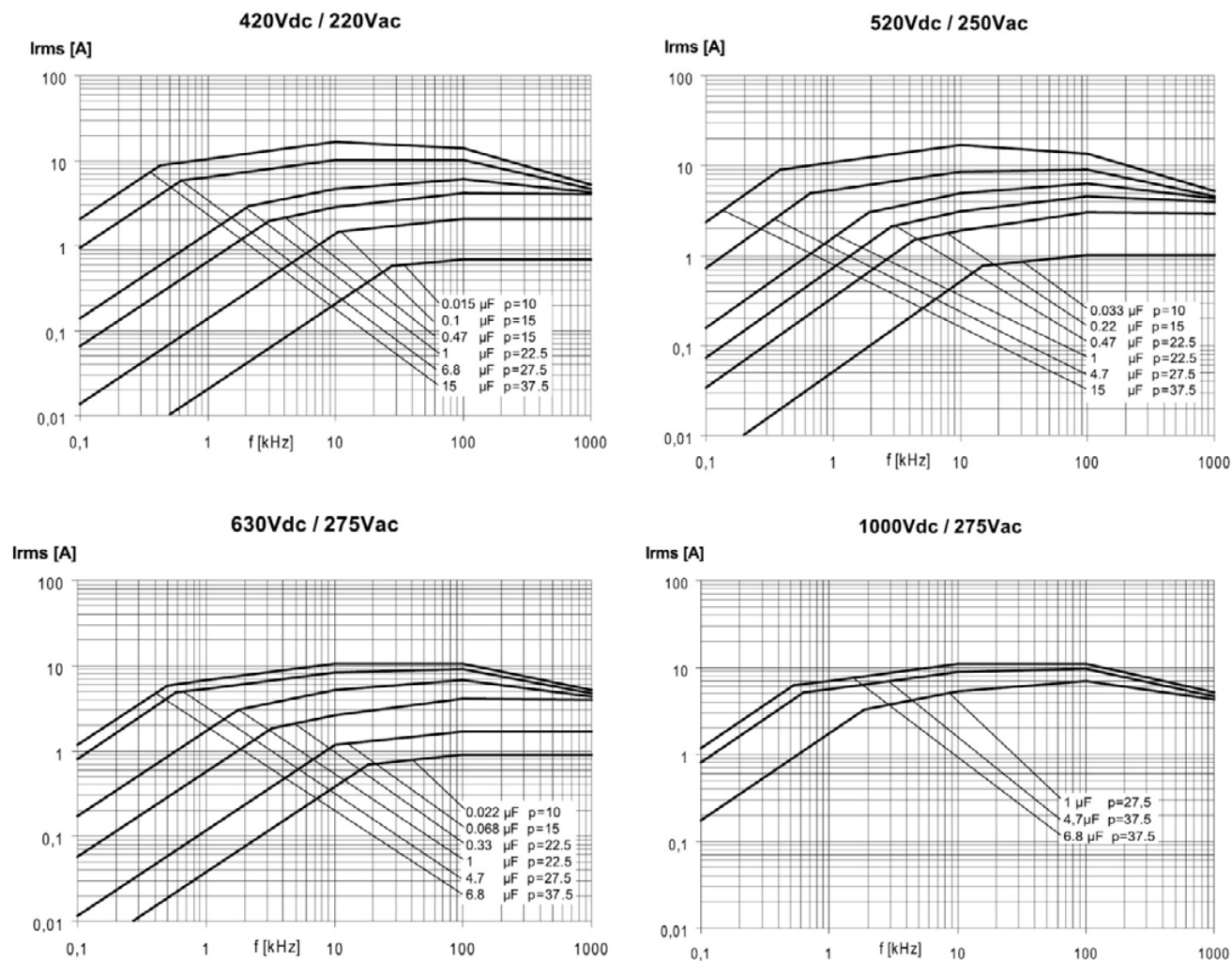
630Vdc / 275Vac



1000Vdc / 275Vac



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



Environmental Test Data

Test	IEC Publication	Procedure	Requirements
Voltage Proof	60384-1 Clause 4.6	$1.6 \times V_R$ after 60 seconds	The capacitors must withstand the voltage without breakdowns or flashovers and without decreased insulation resistance below the value in each detail specification. No visible damage
	Clause 4.6 2.3	$2 \times V_R$ (minimum 400 VDC to case) after 60 seconds	As above
Vibration	60068-2-6 Test Fc	6 hours with 10 – 500 Hz and 0.75 mm amplitude or 98 m/s ² depending on frequency	No visible damage $\tan \delta \leq 1.2 \times \text{stated value at 100 kHz}$ $\Delta C/C \leq \pm 0.5 \%$
Bump	60068-2-29 Test Eb	4,000 bumps with 390 m/s ² mounted on PCB	$\Delta C/C \leq \pm 0.5 \%$ $\tan \delta \leq 1.2 \times \text{stated value at 100 kHz}$ Insulation resistance: $\geq 100,000 \text{ M}\Omega$ for $C_R \leq 0.33 \mu\text{F}$ $\geq 30,000 \text{ M}\Omega \cdot \mu\text{F}$ for $C_R > 0.33 \mu\text{F}$
Resistance to Soldering Heat	60068-2-20 Method 1A	Solder bath at $+260^\circ\text{C} \pm 5^\circ\text{C}$ with screening	Immersion of the terminations into the solder bath shall be completed in a time not exceeding 1 second and the terminations shall remain immersed to the specified depth for 10 + 1 second and then be withdrawn. $\Delta C/C \leq \pm 1.0 \%$ $\tan \delta \text{ increase} < 0.001$ No visible damage
Climatic Sequence	60384-1 Paragraph 4:21	60068-2.2 dry heat 16 hours 60068-2-34 damp heat, one cycle 60068-2-1 Test Aa 2 hours	Insulation resistance: $\geq 100,000 \text{ M}\Omega$ for $C_R \leq 0.33 \mu\text{F}$ $\geq 30,000 \text{ M}\Omega \cdot \mu\text{F}$ for $C_R > 0.33 \mu\text{F}$ $\Delta C/C \leq \pm 0.5 \%$ $\tan \delta \leq 1.2 \times \text{stated value at 100 kHz}$
Damp Heat Steady State	60068-2-3 Test Ca	$+40^\circ\text{C}$ and 90 – 95% RH	56 days no visible damage Insulation resistance: $\geq 50,000 \text{ M}\Omega$ for $C_R \leq 0.33 \mu\text{F}$ $\geq 15,000 \text{ M}\Omega \cdot \mu\text{F}$ for $C_R > 0.33 \mu\text{F}$ $\Delta C/C \leq \pm 1 \%$ $\tan \delta \leq 1.2 \times \text{stated value at 100 kHz}$
Endurance, AC		1,000 hours at $+85^\circ\text{C}$ and $1.25 \times V_R$ AC	No visible damage $\Delta C/C \leq \pm 3 \%$ $\tan \delta \leq 1.5 \times \text{stated value at 100 kHz}$ Insulation resistance: $\geq 100,000 \text{ M}\Omega$ for $C_R \leq 0.33 \mu\text{F}$ $\geq 30,000 \text{ M}\Omega \cdot \mu\text{F}$ for $C_R > 0.33 \mu\text{F}$
Charge and Discharge	60384-17 Paragraph 4.13	10,000 pulses and with (2 x) dV/dt according to detail specification	$\tan \delta (100 \text{ kHz}) \leq 2 \times \text{stated value (100 kHz)}$ $\Delta C/C \leq \pm 0.5 \%$ Insulation resistance: $\geq 50,000 \text{ M}\Omega$ for $C_R \leq 0.33 \mu\text{F}$ $\geq 15,000 \text{ M}\Omega \cdot \mu\text{F}$ for $C_R > 0.33 \mu\text{F}$

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.



RoHS Compliant

Table 1 – Ratings & Part Number Reference

VDC	VAC	Capacitance Value (μF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
420	220	0.015	4.0	9.0	13.0	10.0	250	210 E3	71MF2150(1)00(2)	R71MF2150(1)00(2)
420	220	0.022	4.0	9.0	13.0	10.0	250	210 E3	71MF2220(1)00(2)	R71MF2220(1)00(2)
420	220	0.033	4.0	9.0	13.0	10.0	250	210 E3	71MF2330(1)00(2)	R71MF2330(1)00(2)
420	220	0.047	4.0	9.0	13.0	10.0	250	210 E3	71MF2470(1)00(2)	R71MF2470(1)00(2)
420	220	0.068	4.0	9.0	13.0	10.0	250	210 E3	71MF2680(1)30(2)	R71MF2680(1)30(2)
420	220	0.10	4.0	9.0	13.0	10.0	250	210 E3	71MF3100(1)30(2)	R71MF3100(1)30(2)
420	220	0.15	5.0	11.0	13.0	10.0	250	210 E3	71MF3150(1)30(2)	R71MF3150(1)30(2)
420	220	0.22	6.0	12.0	13.0	10.0	250	210 E3	71MF3220(1)30(2)	R71MF3220(1)30(2)
420	220	0.10	5.0	11.0	18.0	15.0	160	134 E3	71MI3100(1)00(2)	R71MI3100(1)00(2)
420	220	0.15	5.0	11.0	18.0	15.0	160	134 E3	71MI3150(1)00(2)	R71MI3150(1)00(2)
420	220	0.22	5.0	11.0	18.0	15.0	160	134 E3	71MI3220(1)00(2)	R71MI3220(1)00(2)
420	220	0.33	6.0	12.0	18.0	15.0	160	134 E3	71MI3330(1)00(2)	R71MI3330(1)00(2)
420	220	0.47	7.5	13.5	18.0	15.0	160	134 E3	71MI3470(1)00(2)	R71MI3470(1)00(2)
420	220	0.47	6.0	17.5	18.0	15.0	160	134 E3	71MI3470(1)10(2)	R71MI3470(1)10(2)
420	220	0.47	9.0	12.5	18.0	15.0	160	134 E3	71MI3470(1)20(2)	R71MI3470(1)20(2)
420	220	0.68	6.0	17.5	18.0	15.0	160	134 E3	71MI3680(1)40(2)	R71MI3680(1)40(2)
420	220	0.68	8.5	14.5	18.0	15.0	160	134 E3	71MI3680(1)30(2)	R71MI3680(1)30(2)
420	220	0.68	13.0	12.0	18.0	15.0	160	134 E3	71MI3680(1)20(2)	R71MI3680(1)20(2)
420	220	1.0	7.5	18.5	18.0	15.0	160	134 E3	71MI4100(1)40M	R71MI4100(1)40M
420	220	1.0	10.0	16.0	18.0	15.0	160	134 E3	71MI4100(1)30(2)	R71MI4100(1)30(2)
420	220	1.5	11.0	19.0	18.0	15.0	160	134 E3	71MI4150(1)30(2)	R71MI4150(1)30(2)
420	220	0.22	6.0	15.0	26.5	22.5	100	84 E3	71MN3220(1)00(2)	R71MN3220(1)00(2)
420	220	0.33	6.0	15.0	26.5	22.5	100	84 E3	71MN3330(1)00(2)	R71MN3330(1)00(2)
420	220	0.47	6.0	15.0	26.5	22.5	100	84 E3	71MN3470(1)00(2)	R71MN3470(1)00(2)
420	220	0.68	6.0	15.0	26.5	22.5	100	84 E3	71MN3680(1)00(2)	R71MN3680(1)00(2)
420	220	1.0	7.0	16.0	26.5	22.5	100	84 E3	71MN4100(1)30(2)	R71MN4100(1)30(2)
420	220	1.5	8.5	17.0	26.5	22.5	100	84 E3	71MN4150(1)30M	R71MN4150(1)30M
420	220	1.5	10.0	18.5	26.5	22.5	100	84 E3	71MN4150(1)00(2)	R71MN4150(1)00(2)
420	220	2.2	10.0	18.5	26.5	22.5	100	84 E3	71MN4220(1)40M	R71MN4220(1)40M
420	220	2.2	11.0	20.0	26.5	22.5	100	84 E3	71MN4220(1)30(2)	R71MN4220(1)30(2)
420	220	3.3	13.0	22.0	26.5	22.5	100	84 E3	71MN4330(1)30(2)	R71MN4330(1)30(2)
420	220	0.68	9.0	17.0	32.0	27.5	80	67 E3	71MR3680(1)00(2)	R71MR3680(1)00(2)
420	220	1.0	9.0	17.0	32.0	27.5	80	67 E3	71MR4100(1)00(2)	R71MR4100(1)00(2)
420	220	1.5	11.0	20.0	32.0	27.5	80	67 E3	71MR4150(1)00(2)	R71MR4150(1)00(2)
420	220	2.2	13.0	22.0	32.0	27.5	80	67 E3	71MR4220(1)00(2)	R71MR4220(1)00(2)
420	220	3.3	14.0	28.0	32.0	27.5	80	67 E3	71MR4330(1)30(2)	R71MR4330(1)30(2)
420	220	4.7	18.0	33.0	32.0	27.5	80	67 E3	71MR4470(1)00(2)	R71MR4470(1)00(2)
420	220	6.8	22.0	37.0	32.0	27.5	80	67 E3	71MR4680(1)00(2)	R71MR4680(1)00(2)
420	220	3.3	11.0	22.0	41.5	37.5	60	50 E3	71MW4330(1)00(2)	R71MW4330(1)00(2)
420	220	4.7	16.0	28.5	41.5	37.5	60	50 E3	71MW4470(1)00(2)	R71MW4470(1)00(2)
420	220	6.8	19.0	32.0	41.5	37.5	60	50 E3	71MW4680(1)00(2)	R71MW4680(1)00(2)
420	220	10.0	20.0	40.0	41.5	37.5	60	50 E3	71MW5100(1)00(2)	R71MW5100(1)00(2)
420	220	15.0	24.0	44.0	41.5	37.5	60	50 E3	71MW5150(1)00(2)	R71MW5150(1)00(2)
420	220	22.0	30.0	45.0	41.5	37.5	60	50 E3	71MW5220(1)00(2)	R71MW5220(1)00(2)
520	250	0.010	4.0	9.0	13.0	10.0	300	312 E3	71VF2100(1)00(2)	R71VF2100(1)00(2)
520	250	0.015	4.0	9.0	13.0	10.0	300	312 E3	71VF2150(1)00(2)	R71VF2150(1)00(2)
520	250	0.022	4.0	9.0	13.0	10.0	300	312 E3	71VF2220(1)00(2)	R71VF2220(1)00(2)
520	250	0.033	4.0	9.0	13.0	10.0	300	312 E3	71VF2330(1)00(2)	R71VF2330(1)00(2)
520	250	0.047	4.0	9.0	13.0	10.0	300	312 E3	71VF2470(1)30(2)	R71VF2470(1)30(2)
520	250	0.068	4.0	9.0	13.0	10.0	300	312 E3	71VF2680(1)30(2)	R71VF2680(1)30(2)
520	250	0.10	5.0	11.0	13.0	10.0	300	312 E3	71VF3100(1)30(2)	R71VF3100(1)30(2)
520	250	0.15	6.0	12.0	13.0	10.0	300	312 E3	71VF3150(1)30(2)	R71VF3150(1)30(2)
520	250	0.10	5.0	11.0	18.0	15.0	200	208 E3	71VI3100(1)00(2)	R71VI3100(1)00(2)
520	250	0.15	5.0	11.0	18.0	15.0	200	208 E3	71VI3150(1)30(2)	R71VI3150(1)30(2)
520	250	0.22	6.0	12.0	18.0	15.0	200	208 E3	71VI3220(1)30(2)	R71VI3220(1)30(2)
520	250	0.22	6.0	17.5	18.0	15.0	200	208 E3	71VI3220(1)10(2)	R71VI3220(1)10(2)
520	250	0.33	6.0	17.5	18.0	15.0	200	208 E3	71VI3330(1)40(2)	R71VI3330(1)40(2)
520	250	0.33	7.5	13.5	18.0	15.0	200	208 E3	71VI3330(1)30(2)	R71VI3330(1)30(2)
520	250	0.33	9.0	12.5	18.0	15.0	200	208 E3	71VI3330(1)20(2)	R71VI3330(1)20(2)
520	250	0.47	8.5	14.5	18.0	15.0	200	208 E3	71VI3470(1)30(2)	R71VI3470(1)30(2)
VDC	VAC	Capacitance Value (μF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number

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

(2) J = 5%, K = 10%, M = 20%.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (μF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
520	250	0.47	7.5	18.5	18.0	15.0	200	208 E3	71VI3470(1)10(2)	R71VI3470(1)10(2)
520	250	0.47	13.0	12.0	18.0	15.0	200	208 E3	71VI3470(1)20(2)	R71VI3470(1)20(2)
520	250	0.68	10.0	16.0	18.0	15.0	200	208 E3	71VI3680(1)30(2)	R71VI3680(1)30(2)
520	250	1.0	11.0	19.0	18.0	15.0	200	208 E3	71VI4100(1)30M	R71VI4100(1)30M
520	250	0.22	6.0	15.0	26.5	22.5	120	125 E3	71VN3220(1)00(2)	R71VN3220(1)00(2)
520	250	0.33	6.0	15.0	26.5	22.5	120	125 E3	71VN3330(1)00(2)	R71VN3330(1)00(2)
520	250	0.47	6.0	15.0	26.5	22.5	120	125 E3	71VN3470(1)30(2)	R71VN3470(1)30(2)
520	250	0.68	7.0	16.0	26.5	22.5	120	125 E3	71VN3680(1)30(2)	R71VN3680(1)30(2)
520	250	1.0	10.0	18.5	26.5	22.5	120	125 E3	71VN4100(1)30(2)	R71VN4100(1)30(2)
520	250	1.5	11.0	20.0	26.5	22.5	120	125 E3	71VN4150(1)30(2)	R71VN4150(1)30(2)
520	250	2.2	13.0	22.0	26.5	22.5	120	125 E3	71VN4220(1)30(2)	R71VN4220(1)30(2)
520	250	0.68	9.0	17.0	32.0	27.5	100	104 E3	71VR3680(1)00(2)	R71VR3680(1)00(2)
520	250	1.0	9.0	17.0	32.0	27.5	100	104 E3	71VR4100(1)30(2)	R71VR4100(1)30(2)
520	250	1.0	11.0	20.0	32.0	27.5	100	104 E3	71VR4100(1)00(2)	R71VR4100(1)00(2)
520	250	1.5	11.0	20.0	32.0	27.5	100	104 E3	71VR4150(1)00(2)	R71VR4150(1)00(2)
520	250	2.2	13.0	25.0	32.0	27.5	100	104 E3	71VR4220(1)30(2)	R71VR4220(1)30(2)
520	250	2.2	14.0	28.0	32.0	27.5	100	104 E3	71VR4220(1)00(2)	R71VR4220(1)00(2)
520	250	3.3	14.0	28.0	32.0	27.5	100	104 E3	71VR4330(1)30(2)	R71VR4330(1)30(2)
520	250	3.3	18.0	33.0	32.0	27.5	100	104 E3	71VR4330(1)00(2)	R71VR4330(1)00(2)
520	250	4.7	18.0	33.0	32.0	27.5	100	104 E3	71VR4470(1)30(2)	R71VR4470(1)30(2)
520	250	4.7	22.0	37.0	32.0	27.5	100	104 E3	71VR4470(1)00(2)	R71VR4470(1)00(2)
520	250	6.8	22.0	37.0	32.0	27.5	100	104 E3	71VR4680(1)30(2)	R71VR4680(1)30(2)
520	250	2.2	11.0	22.0	41.5	37.5	70	73 E3	71VW4220(1)00(2)	R71VW4220(1)00(2)
520	250	3.3	13.0	24.0	41.5	37.5	70	73 E3	71VW4330(1)30(2)	R71VW4330(1)30(2)
520	250	3.3	16.0	28.5	41.5	37.5	70	73 E3	71VW4330(1)00(2)	R71VW4330(1)00(2)
520	250	4.7	16.0	28.5	41.5	37.5	70	73 E3	71VW4470(1)00(2)	R71VW4470(1)00(2)
520	250	6.8	19.0	32.0	41.5	37.5	70	73 E3	71VW4680(1)30(2)	R71VW4680(1)30(2)
520	250	6.8	20.0	40.0	41.5	37.5	70	73 E3	71VW4680(1)00(2)	R71VW4680(1)00(2)
520	250	10.0	20.0	40.0	41.5	37.5	70	73 E3	71VW5100(1)30(2)	R71VW5100(1)30(2)
520	250	10.0	24.0	44.0	41.5	37.5	70	73 E3	71VW5100(1)00(2)	R71VW5100(1)00(2)
520	250	15.0	24.0	44.0	41.5	37.5	70	73 E3	71VW5150(1)30(2)	R71VW5150(1)30(2)
520	250	15.0	30.0	45.0	41.5	37.5	70	73 E3	71VW5150(1)00(2)	R71VW5150(1)00(2)
520	250	22.0	30.0	45.0	41.5	37.5	70	73 E3	71VW5220(1)00(2)	R71VW5220(1)00(2)
630	275	0.010	4.0	9.0	13.0	10.0	400	504 E3	71PF2100(1)30(2)	R71PF2100(1)30(2)
630	275	0.015	4.0	9.0	13.0	10.0	400	504 E3	71PF2150(1)30(2)	R71PF2150(1)30(2)
630	275	0.022	4.0	9.0	13.0	10.0	400	504 E3	71PF2220(1)30(2)	R71PF2220(1)30(2)
630	275	0.033	5.0	11.0	13.0	10.0	400	504 E3	71PF2330(1)00(2)	R71PF2330(1)00(2)
630	275	0.047	5.0	11.0	13.0	10.0	400	504 E3	71PF2470(1)30(2)	R71PF2470(1)30(2)
630	275	0.068	6.0	12.0	13.0	10.0	400	504 E3	71PF2680(1)30(2)	R71PF2680(1)30(2)
630	275	0.1	6.0	12.0	13.0	10.0	400	504 E3	71PF3100(1)30M	R71PF3100(1)30M
630	275	0.010	5.0	11.0	18.0	15.0	250	315 E3	71PI2100(1)00(2)	R71PI2100(1)00(2)
630	275	0.015	5.0	11.0	18.0	15.0	250	315 E3	71PI2150(1)00(2)	R71PI2150(1)00(2)
630	275	0.022	5.0	11.0	18.0	15.0	250	315 E3	71PI2220(1)00(2)	R71PI2220(1)00(2)
630	275	0.033	5.0	11.0	18.0	15.0	250	315 E3	71PI2330(1)00(2)	R71PI2330(1)00(2)
630	275	0.047	5.0	11.0	18.0	15.0	250	315 E3	71PI2470(1)00(2)	R71PI2470(1)00(2)
630	275	0.068	5.0	11.0	18.0	15.0	250	315 E3	71PI2680(1)00(2)	R71PI2680(1)00(2)
630	275	0.10	5.0	11.0	18.0	15.0	250	315 E3	71PI3100(1)30(2)	R71PI3100(1)30(2)
630	275	0.15	6.0	12.0	18.0	15.0	250	315 E3	71PI3150(1)30(2)	R71PI3150(1)30(2)
630	275	0.15	6.0	17.5	18.0	15.0	250	315 E3	71PI3150(1)40(2)	R71PI3150(1)40(2)
630	275	0.22	7.5	13.5	18.0	15.0	250	315 E3	71PI3220(1)30(2)	R71PI3220(1)30(2)
630	275	0.22	6.0	17.5	18.0	15.0	250	315 E3	71PI3220(1)10(2)	R71PI3220(1)10(2)
630	275	0.22	9.0	12.5	18.0	15.0	250	315 E3	71PI3220(1)20(2)	R71PI3220(1)20(2)
630	275	0.33	8.5	14.5	18.0	15.0	250	315 E3	71PI3330(1)30(2)	R71PI3330(1)30(2)
630	275	0.33	7.5	18.5	18.0	15.0	250	315 E3	71PI3330(1)10(2)	R71PI3330(1)10(2)
630	275	0.33	9.0	12.5	18.0	15.0	250	315 E3	71PI3330(1)40M	R71PI3330(1)40M
630	275	0.33	13.0	12.0	18.0	15.0	250	315 E3	71PI3330(1)20(2)	R71PI3330(1)20(2)
630	275	0.47	7.5	18.5	18.0	15.0	250	315 E3	71PI3470(1)40M	R71PI3470(1)40M
630	275	0.47	10.0	16.0	18.0	15.0	250	315 E3	71PI3470(1)30M	R71PI3470(1)30M
630	275	0.68	11.0	19.0	18.0	15.0	250	315 E3	71PI3680(1)30M	R71PI3680(1)30M
630	275	0.15	6.0	15.0	26.5	22.5	160	202 E3	71PN3150(1)00(2)	R71PN3150(1)00(2)
VDC	VAC	Capacitance Value (μF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number

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

(2) J = 5%, K = 10%, M = 20%.

Table 1 – Ratings & Part Number Reference cont'd

VDC	VAC	Capacitance Value (μF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
630	275	0.22	6.0	15.0	26.5	22.5	160	202 E3	71PN3220(1)00(2)	R71PN3220(1)00(2)
630	275	0.33	6.0	15.0	26.5	22.5	160	202 E3	71PN3330(1)30(2)	R71PN3330(1)30(2)
630	275	0.47	7.0	16.0	26.5	22.5	160	202 E3	71PN3470(1)30(2)	R71PN3470(1)30(2)
630	275	0.68	10.0	18.5	26.5	22.5	160	202 E3	71PN3680(1)30(2)	R71PN3680(1)30(2)
630	275	1.0	10.0	18.5	26.5	22.5	160	202 E3	71PN4100(1)40M	R71PN4100(1)40M
630	275	1.0	11.0	20.0	26.5	22.5	160	202 E3	71PN4100(1)30(2)	R71PN4100(1)30(2)
630	275	0.68	9.0	17.0	32.0	27.5	115	145 E3	71PR3680(1)00(2)	R71PR3680(1)00(2)
630	275	1.0	11.0	20.0	32.0	27.5	115	145 E3	71PR4100(1)00(2)	R71PR4100(1)00(2)
630	275	1.5	13.0	22.0	32.0	27.5	115	145 E3	71PR4150(1)00(2)	R71PR4150(1)00(2)
630	275	2.2	14.0	28.0	32.0	27.5	115	145 E3	71PR4220(1)00(2)	R71PR4220(1)00(2)
630	275	3.3	18.0	33.0	32.0	27.5	115	145 E3	71PR4330(1)00(2)	R71PR4330(1)00(2)
630	275	4.7	22.0	37.0	32.0	27.5	115	145 E3	71PR4470(1)00(2)	R71PR4470(1)00(2)
630	275	1.5	11.0	22.0	41.5	37.5	80	100 E3	71PW4150(1)00(2)	R71PW4150(1)00(2)
630	275	2.2	13.0	24.0	41.5	37.5	80	100 E3	71PW4220(1)00(2)	R71PW4220(1)00(2)
630	275	3.3	16.0	28.5	41.5	37.5	80	100 E3	71PW4330(1)00(2)	R71PW4330(1)00(2)
630	275	4.7	19.0	32.0	41.5	37.5	80	100 E3	71PW4470(1)00(2)	R71PW4470(1)00(2)
630	275	6.8	20.0	40.0	41.5	37.5	80	100 E3	71PW4680(1)00(2)	R71PW4680(1)00(2)
630	275	10.0	24.0	44.0	41.5	37.5	80	100 E3	71PW5100(1)00(2)	R71PW5100(1)00(2)
630	275	15.0	30.0	45.0	41.5	37.5	80	100 E3	71PW5150(1)00(2)	R71PW5150(1)00(2)
1000	275	0.22	9.0	17.0	32.0	27.5	180	360 E3	71QR3220(1)00(2)	R71QR3220(1)00(2)
1000	275	0.27	9.0	17.0	32.0	27.5	180	360 E3	71QR3270(1)00(2)	R71QR3270(1)00(2)
1000	275	0.33	9.0	17.0	32.0	27.5	180	360 E3	71QR3330(1)10(2)	R71QR3330(1)10(2)
1000	275	0.33	11.0	20.0	32.0	27.5	180	360 E3	71QR3330(1)00(2)	R71QR3330(1)00(2)
1000	275	0.39	9.0	17.0	32.0	27.5	180	360 E3	71QR3390(1)10(2)	R71QR3390(1)10(2)
1000	275	0.39	11.0	20.0	32.0	27.5	180	360 E3	71QR3390(1)00(2)	R71QR3390(1)00(2)
1000	275	0.47	9.0	17.0	32.0	27.5	180	360 E3	71QR3470(1)10(2)	R71QR3470(1)10(2)
1000	275	0.47	13.0	22.0	32.0	27.5	180	360 E3	71QR3470(1)00(2)	R71QR3470(1)00(2)
1000	275	0.56	9.0	17.0	32.0	27.5	180	360 E3	71QR3560(1)10(2)	R71QR3560(1)10(2)
1000	275	0.56	13.0	22.0	32.0	27.5	180	360 E3	71QR3560(1)00(2)	R71QR3560(1)00(2)
1000	275	0.68	11.0	20.0	32.0	27.5	180	360 E3	71QR3680(1)10(2)	R71QR3680(1)10(2)
1000	275	0.68	14.0	28.0	32.0	27.5	180	360 E3	71QR3680(1)00(2)	R71QR3680(1)00(2)
1000	275	0.82	11.0	20.0	32.0	27.5	180	360 E3	71QR3820(1)10(2)	R71QR3820(1)10(2)
1000	275	0.82	14.0	28.0	32.0	27.5	180	360 E3	71QR3820(1)00(2)	R71QR3820(1)00(2)
1000	275	1.0	13.0	22.0	32.0	27.5	180	360 E3	71QR4100(1)10(2)	R71QR4100(1)10(2)
1000	275	1.0	18.0	33.0	32.0	27.5	180	360 E3	71QR4100(1)00(2)	R71QR4100(1)00(2)
1000	275	1.2	13.0	25.0	32.0	27.5	180	360 E3	71QR4120(1)10(2)	R71QR4120(1)10(2)
1000	275	1.2	18.0	33.0	32.0	27.5	180	360 E3	71QR4120(1)00(2)	R71QR4120(1)00(2)
1000	275	1.5	14.0	28.0	32.0	27.5	180	360 E3	71QR4150(1)10(2)	R71QR4150(1)10(2)
1000	275	1.5	18.0	33.0	32.0	27.5	180	360 E3	71QR4150(1)00(2)	R71QR4150(1)00(2)
1000	275	1.8	14.0	28.0	32.0	27.5	180	360 E3	71QR4180(1)10(2)	R71QR4180(1)10(2)
1000	275	1.8	22.0	37.0	32.0	27.5	180	360 E3	71QR4180(1)00(2)	R71QR4180(1)00(2)
1000	275	2.2	18.0	33.0	32.0	27.5	180	360 E3	71QR4220(1)10(2)	R71QR4220(1)10(2)
1000	275	2.2	22.0	37.0	32.0	27.5	180	360 E3	71QR4220(1)00(2)	R71QR4220(1)00(2)
1000	275	2.7	18.0	33.0	32.0	27.5	180	360 E3	71QR4270(1)10(2)	R71QR4270(1)10(2)
1000	275	3.3	22.0	37.0	32.0	27.5	180	360 E3	71QR4330(1)10(2)	R71QR4330(1)10(2)
1000	275	3.9	22.0	37.0	32.0	27.5	180	360 E3	71QR4390(1)10(2)	R71QR4390(1)10(2)
1000	275	0.68	11.0	22.0	41.5	37.5	150	300 E3	71QW3680(1)00(2)	R71QW3680(1)00(2)
1000	275	0.82	13.0	24.0	41.5	37.5	150	300 E3	71QW3820(1)00(2)	R71QW3820(1)00(2)
1000	275	1.0	11.0	22.0	41.5	37.5	150	300 E3	71QW4100(1)10(2)	R71QW4100(1)10(2)
1000	275	1.0	13.0	24.0	41.5	37.5	150	300 E3	71QW4100(1)00(2)	R71QW4100(1)00(2)
1000	275	1.2	11.0	22.0	41.5	37.5	150	300 E3	71QW4120(1)10(2)	R71QW4120(1)10(2)
1000	275	1.2	16.0	28.5	41.5	37.5	150	300 E3	71QW4120(1)00(2)	R71QW4120(1)00(2)
1000	275	1.5	11.0	22.0	41.5	37.5	150	300 E3	71QW4150(1)10(2)	R71QW4150(1)10(2)
1000	275	1.5	16.0	28.5	41.5	37.5	150	300 E3	71QW4150(1)00(2)	R71QW4150(1)00(2)
1000	275	1.8	13.0	24.0	41.5	37.5	150	300 E3	71QW4180(1)10(2)	R71QW4180(1)10(2)
1000	275	1.8	19.0	32.0	41.5	37.5	150	300 E3	71QW4180(1)00(2)	R71QW4180(1)00(2)
1000	275	2.2	16.0	28.5	41.5	37.5	120	240 E3	71QW4220(1)10(2)	R71QW4220(1)10(2)
1000	275	2.2	19.0	32.0	41.5	37.5	120	240 E3	71QW4220(1)00(2)	R71QW4220(1)00(2)
1000	275	2.7	16.0	28.5	41.5	37.5	120	240 E3	71QW4270(1)10(2)	R71QW4270(1)10(2)
1000	275	2.7	20.0	40.0	41.5	37.5	120	240 E3	71QW4270(1)00(2)	R71QW4270(1)00(2)
VDC	VAC	Capacitance Value (μF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number

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

(2) J = 5%, K = 10%, M = 20%.

Table 1 – Ratings & Part Number Reference cont'd

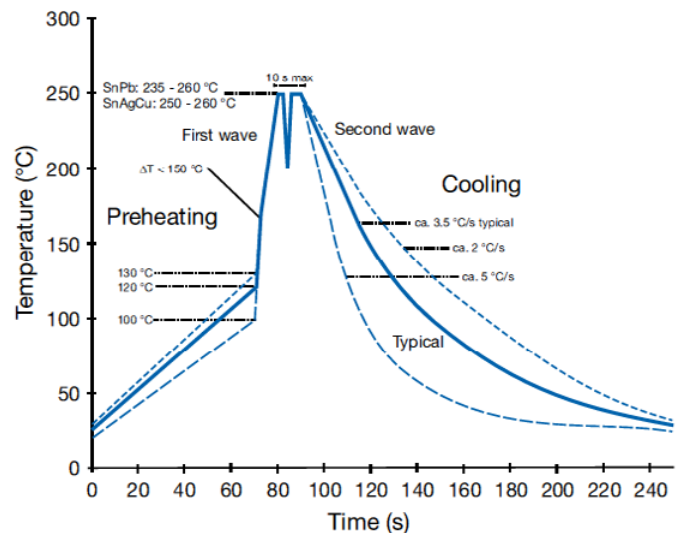
VDC	VAC	Capacitance Value (μF)	Dimensions in mm			Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number
			B	H	L					
1000	275	3.3	19.0	32.0	41.5	37.5	120	240 E3	71QW4330(1)10(2)	R71QW4330(1)10(2)
1000	275	3.3	24.0	44.0	41.5	37.5	120	240 E3	71QW4330(1)00(2)	R71QW4330(1)00(2)
1000	275	3.9	19.0	32.0	41.5	37.5	120	240 E3	71QW4390(1)10(2)	R71QW4390(1)10(2)
1000	275	3.9	24.0	44.0	41.5	37.5	120	240 E3	71QW4390(1)00(2)	R71QW4390(1)00(2)
1000	275	4.7	20.0	40.0	41.5	37.5	80	160 E3	71QW4470(1)10(2)	R71QW4470(1)10(2)
1000	275	4.7	24.0	44.0	41.5	37.5	80	160 E3	71QW4470(1)00(2)	R71QW4470(1)00(2)
1000	275	5.6	20.0	40.0	41.5	37.5	80	160 E3	71QW4560(1)10(2)	R71QW4560(1)10(2)
1000	275	5.6	30.0	45.0	41.5	37.5	80	160 E3	71QW4560(1)00(2)	R71QW4560(1)00(2)
1000	275	6.8	24.0	44.0	41.5	37.5	80	160 E3	71QW4680(1)10(2)	R71QW4680(1)10(2)
1000	275	8.2	24.0	44.0	41.5	37.5	80	160 E3	71QW4820(1)10(2)	R71QW4820(1)10(2)
VDC	VAC	Capacitance Value (μF)	B (mm)	H (mm)	L (mm)	Lead Spacing (p)	dV/dt (V/μs)	Max K ₀ (V ² /μs)	New KEMET Part Number	Legacy Part Number

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

(2) J = 5%, K = 10%, M = 20%.

Soldering Process

The implementation of the RoHS Directive has required the selection SnAuCu (SAC) alloys or SnCu alloys as primary solder. This has increased the liquidus temperature from that of 183°C for SnPb eutectic alloy to 217°C – 221°C for the new alloys. As a result, the heat stress to components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (melting point of polypropylene is 160°C – 170°C). Wave soldering can be destructive especially for mechanically small polypropylene capacitors and great care must be taken during soldering. The solder profiles from KEMET are highly recommended. You may also refer to the wave soldering curve from IEC Publication 61760–1 Edition 2. Please consult KEMET with any questions.



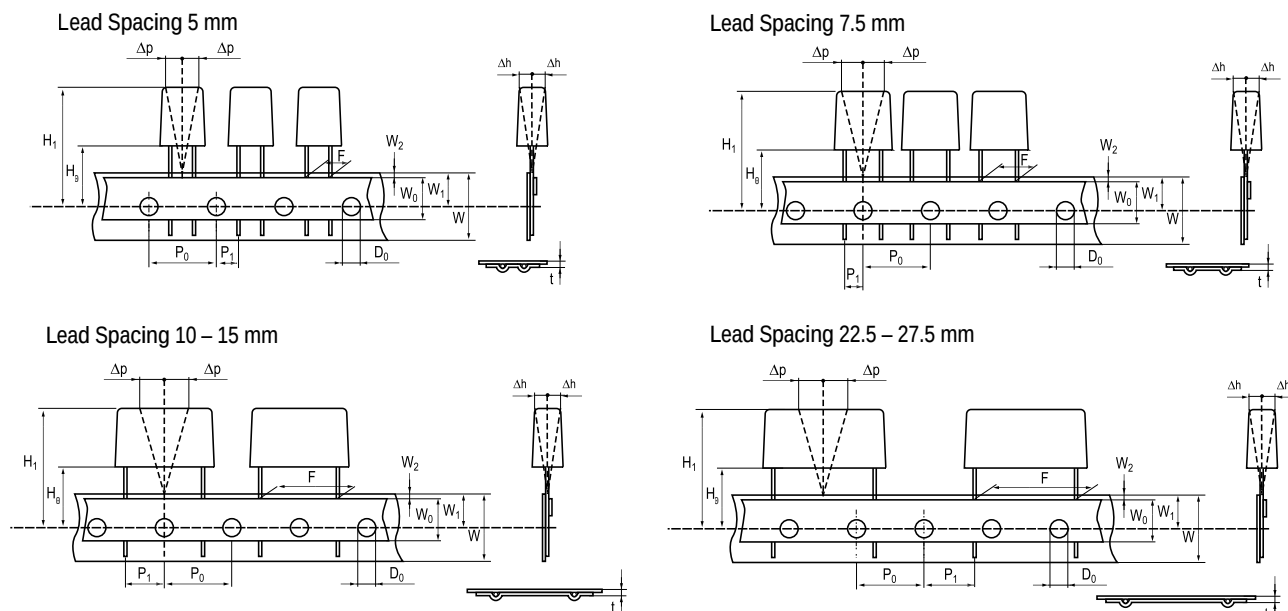
Marking

- KEMET's logo
- Series
- Capacitance
- Capacitance tolerance
- Rated DC voltage
- Manufacturing date code

Packaging Quantities

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads	Standard Reel Ø 355 mm	Large Reel Ø 500 mm	Ammo	Pizza
10	4	9	13	2000	2200	750	1500	1000	
	5	11	13	1300	2000	600	1250	800	
	6	12	13	1000	1800	500	1000	680	
15	4	10	18	2500	1500	750	1500	1000	1411
	5	11	18	1000	1250	600	1250	800	1139
	6	12	18	1750	1000	500	1000	680	935
	7.5	13.5	18	1000	800	350	800	500	748
	6	17.5	18	1000	800	500	1000	680	935
	7.5	14.5	18	1000	750	350	800	500	748
	8.5	14.5	18	1000	650	300	700	440	663
	9	12.5	18	1000	700	270	650	410	629
	7.5	18.5	18	900	600	350	800	500	748
	10	16	18	750	550	300	600	380	561
	13	12	18	750	520	200	480	280	425
	11	19	18	450	400	250	500	340	510
22.5	6	15	26.5	1404	702	300	700	464	660
	7	16	26.5	1188	594	250	550	380	564
	8.5	17	26.5	972	486	250	450	280	468
	10	18.5	26.5	810	405	160	350	235	396
	11	20	26.5	630	378	190	350	217	360
	13	22	26.5	540	324	150	300	200	300
27.5	9	17	32	816	408		450		
	10	20	32	600	360		350		
	11	20	32	560	336		350		
	13	22	32	480	288		300		
	13	25	32	480	288				
	14	28	32	352	176				
	15	24.5	32	400	240				
	18	33	32	256	128				
	22	37	32	168	112				

Lead Taping & Packaging (IEC 60286-2)



Taping Specification

Dimensions in mm									Standard IEC 60286-2
Lead spacing	+6/-0.1	F	5	7.5	10	15	22.5	27.5	F
Carrier tape width	+1/-0.5	W	18	18	18	18	18	18	18 ^{+1/-0.5}
Hold-down tape width	Minimum	W ₀	6	6	9	10	10	10	
Position of sprocket hole	+/-0.5	W ₁	9	9	9	9	9	9	9 ^{+0.75/-0.5}
Distance between tapes	Maximum	W ₂	3	3	3	3	3	3	3
Sprocket hole diameter	+/-0.2	D ₀	4	4	4	4	4	4	4
Feed hole lead spacing	+/-0.2 ⁽¹⁾	P ₀ ⁽³⁾	12.7	12.7	12.7	12.7	12.7	12.7	12.7
Distance lead – feed hole	+/-0.7	P ₁	3.85	3.75	7.7	5.2	7.8	5.3	P ¹
Deviation tape – plane	Maximum	Δp	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Lateral deviation	+/-2	Δh	2	2	2	2	2	2	2
Total thickness	+/-0.2	t	0.7	0.7	0.7	0.7	0.9 ^{MAX}	0.9 ^{MAX}	0.9 ^{MAX}
Sprocket hole/cap body	+/-0.5	H ₀ ⁽²⁾	18.5 ^{+/-0.5}	18.5 ^{+/-0.5}	18.5 ^{+/-0.5}	18.5 ^{+/-0.5}	18.5 ^{+/-0.5}	18.5 ^{+/-0.5}	18 ^{+2/-0}

(1) Maximum cumulative feed hole error, 1 mm per 20 parts.

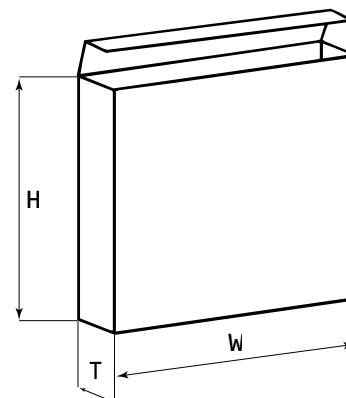
(2) 16.5 mm available on request.

(3) 15 mm available on request (F ≥ 10 mm).

Lead Taping & Packaging (IEC 60286–2) cont'd

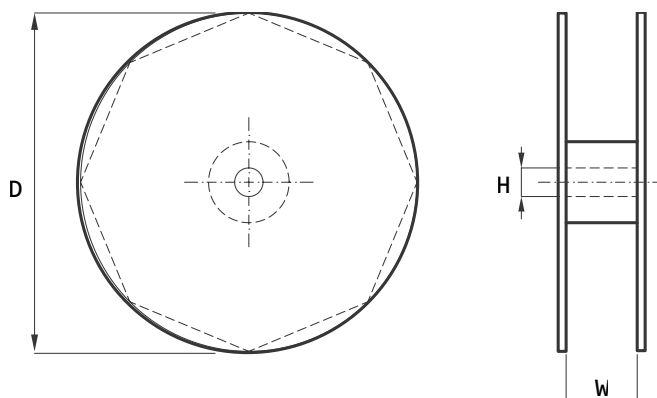
Ammo Specifications

Series	Dimensions (mm)		
	H	W	T
R4x, R4x+R, R7x, RSB	360	340	59
F5A, F5B, F5D			
F6xx, F8xx			
PHExxx, PMExxx, PMRxxx	330	330	50



Reel Specifications

Series	Dimensions (mm)		
	D	H	W
R4x, R4x+R, R7x, RSB	355 500	30	55 (Max)
F5A, F5B, F5D		25	
F6xx, F8xx			
PHExxx, PMExxx, PMRxxx	360 500	30	46 (Max)



Manufacturing Date Code (IEC–60062)

Y = Year, Z = Month			
Year	Code	Month	Code
2000	M	January	1
2001	N	February	2
2002	P	March	3
2003	R	April	4
2004	S	May	5
2005	T	June	6
2006	U	July	7
2007	V	August	8
2008	W	September	9
2009	X	October	O
2010	A	November	N
2011	B	December	D
2012	C		
2013	D		
2014	E		
2015	F		
2016	H		
2017	J		
2018	K		
2019	L		
2020	M		

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
Electrolytic LifeCalculator	http://www.kemet.com:8080/elc

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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