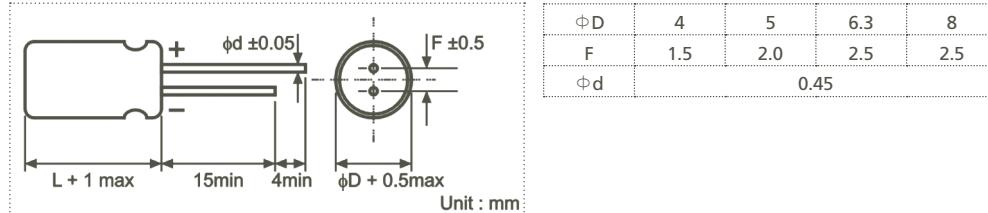


FEATURES

- Super miniature, 5mmL, high temperature, suitable for use in electronic circuit of high density assembly of videocorder, remote controller, VCD etc.

**SPECIFICATIONS**

Item	Performance Characteristics															
Operating Temperature Range	-40 to +105°C															
Rated Working Voltage Range	4 to 50V															
Nominal Capacitance Range	3.3 to 330μF															
Capacitance Tolerance	±20% at 120Hz, +20°C															
Leakage Current	I ≤ 0.01CV or 3 (μA) whichever is greater measured after 2 minutes application of rated working voltage at +20°C															
tan δ (120Hz, +20°C)	Working Voltage (V)	4	6.3	10	16	25	35	50								
	tan δ (max.)	0.37	0.28	0.24	0.20	0.16	0.13	0.12								
Low Temperature Characteristics																
Impedance ratio max. at 120Hz																
Working Voltage (V)																
Z-25°C / Z+20°C																
Z-40°C / Z+20°C																
High Temperature Loading																
Test time : 1,000 hours																
Test temperature : +105°C																
Test conditions : Rated DC working voltage with rated ripple current																
Cap. change : within ±20% of the initial measured value (4V: within ±30%)																
tan δ : ≤200% of the initial specified value																
Shelf Life	At +105°C no voltage applied after 1,000 hours and then being stabilized at +20°C the capacitors shall meet the following limits															
Leakage current : ≤Initial specified value																
Cap. change : within ±20% of the initial measured value (4V: within ±30%)																
Industrial Standard	JIS C - 5101-4 (IEC 60384-4)															

CASE SIZE TABLE**RIPPLE CURRENT MULTIPLIER****Frequency Coefficient**

Coefficient	Freq. (Hz)	50	120	300	1k	10k~
Cap (μF)						
≤47		0.75	1.00	1.35	1.57	2.00
68~330		0.80	1.00	1.23	1.34	1.50

PART NUMBER SYSTEM (EXAMPLE : 16V 33μF)

1	2 3	4 5 6	7	8 9	10	11 12	13 14
E	KF	336	M	1C	E	05	RR

Type (Radial Bulk)
Case Length (5mm)
Diameter (6.3mm)
Voltage (16V)
Tolerance (+20%)
Capacitance (33μF)
Series
E-CAP

STANDARD RATINGS

Voltage (Code)		4V (0G)		6.3V (0J)		10V (1A)		16V (1C)	
Cap. (μF)	Code	Case Size	Ripple Current						
10	106							4 x 5	18
22	226	4 x 5	22	4 x 5	22	4 x 5	24	5 x 5	30
33	336	5 x 5	30	5 x 5	30	5 x 5	35	6.3 x 5	40
47	476	5 x 5	36	5 x 5	36	6.3 x 5	46	6.3 x 5	50
100	107	6.3 x 5	60	6.3 x 5	60	6.3 x 5	67	6.3 x 5	73
220	227			8 x 5	103	8 x 5	116	8 x 5	126
330	337			8 x 5	127				

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz

Case Size ⊕ D x L (mm)

Voltage (Code)		25V (1E)		35V (1V)		50V (1H)	
Cap. (μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
3.3	335			4 x 5	11	4 x 5	14
4.7	475	4 x 5	13	4 x 5	15	5 x 5	19
10	106	4 x 5	20	5 x 5	25	6.3 x 5	30
22	226	6.3 x 5	38	6.3 x 5	48	8 x 5	52
33	336	6.3 x 5	48	6.3 x 5	59	8 x 5	63
47	476	6.3 x 5	58	8 x 5	82		
100	107	8 x 5	97				

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz

Case Size ⊕ D x L (mm)