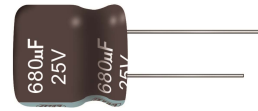




EC Series

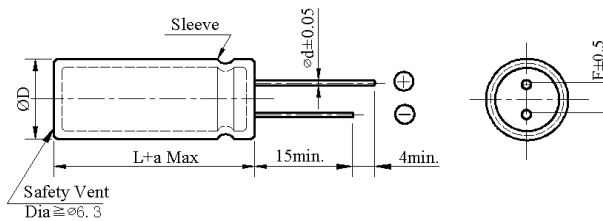
- Miniaturized, Low ESR and Low impedance
- Suitable for use in high ripple current capability
- Load life 5,000 hours at 105°C



◆ SPECIFICATIONS

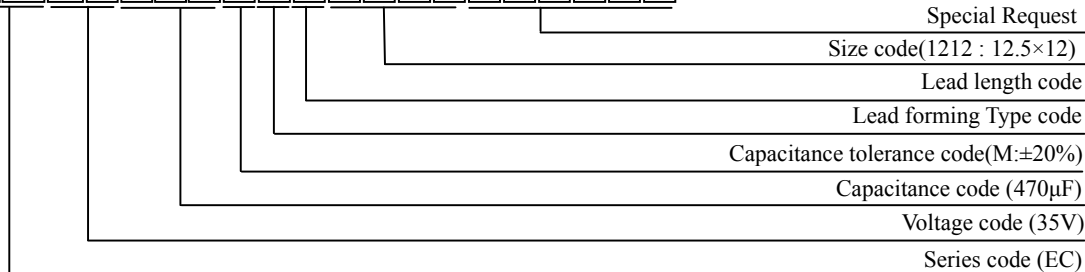
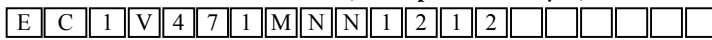
Item	Performance Characteristics												
Category Temperature Range	-40 ~ +105°C												
Working Voltage Range	10 ~ 100Vdc												
Capacitance Range	68 ~ 1,800 µF												
Capacitance Tolerance	±20% (at 25°C and 120Hz)												
Dissipation Factor (tanδ) (at 25°C, 120Hz)	<table border="1"> <tr> <td>Rated Voltage (V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>100</td> </tr> <tr> <td>tanδ(Max)</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.08</td> </tr> </table>	Rated Voltage (V)	10	16	25	35	100	tanδ(Max)	0.19	0.16	0.14	0.12	0.08
	Rated Voltage (V)	10	16	25	35	100							
tanδ(Max)	0.19	0.16	0.14	0.12	0.08								
Leakage Current	I=0.01CV or 3µA whichever is greater I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 2 minutes												
Low Temperature Characteristics Impedance Ratio(MAX)	<table border="1"> <tr> <td>Rated voltage (V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>100</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>6</td> <td>6</td> <td>5</td> <td>4</td> <td>3</td> </tr> </table>	Rated voltage (V)	10	16	25	35	100	Z(-40°C)/Z(+20°C)	6	6	5	4	3
	Rated voltage (V)	10	16	25	35	100							
Z(-40°C)/Z(+20°C)	6	6	5	4	3								
	(at 120Hz)												
Endurance	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 5,000 hours at 105°C.												
	<table border="1"> <tr> <td>Capacitance change</td> <td>≒ ±25% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≒ specified value</td> </tr> </table>	Capacitance change	≒ ±25% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ specified value						
	Capacitance change	≒ ±25% of the initial value											
	Dissipation factor(tanδ)	≒ 200% of the specified value											
Leakage current	≒ specified value												
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 500 hours at 105°C without voltage applied.												
	<table border="1"> <tr> <td>Capacitance change</td> <td>≒ ±25% of the initial value</td> </tr> <tr> <td>Dissipation factor(tanδ)</td> <td>≒ 200% of the specified value</td> </tr> <tr> <td>Leakage current</td> <td>≒ 200% of the specified value</td> </tr> </table>	Capacitance change	≒ ±25% of the initial value	Dissipation factor(tanδ)	≒ 200% of the specified value	Leakage current	≒ 200% of the specified value						
	Capacitance change	≒ ±25% of the initial value											
	Dissipation factor(tanδ)	≒ 200% of the specified value											
Leakage current	≒ 200% of the specified value												
Others	Conforms to JIS-C-5101-4 (1998), characteristic W												

◆ DIMENSIONS (mm)



ΦD	12.5×12
ΦD	ΦD + 0.5 Max
Φd	0.6
F	5.0
a	L + 1.0 Max

◆ PART NUMBER SYSTEM(Example : 35V 470µF)





EC Series

◆ Case size & Permissible rated ripple current

Nominal Capacitance (uF)	10V		16V		25 V	
	Case Size $\Phi D \times L$ (mm)	Max. Rated ripple current @105°C 100kHz (mA rms)	Case Size $\Phi D \times L$ (mm)	Max. Rated ripple current @105°C 100kHz (mA rms)	Case Size $\Phi D \times L$ (mm)	Max. Rated ripple current @105°C 100kHz (mA rms)
560					12.5×12	1150
680					12.5×12	1200
1000			12.5×12	1300		
1200			12.5×12	1400		
1500	12.5×12	1260				
1800	12.5×12	1300				

Nominal Capacitance (uF)	35V		100 V	
	Case Size $\Phi D \times L$ (mm)	Max. Rated ripple current @105°C 100kHz (mA rms)	Case Size $\Phi D \times L$ (mm)	Max. Rated ripple current @105°C 100kHz (mA rms)
68			12.5×12	350
82			12.5×12	420
390	12.5×12	1050		
470	12.5×12	1100		

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Cap(uF)	Frequency (Hz)			
		120	1K	10K	100K
10 ~100	≥68	0.30	0.65	0.85	1.00
	82 ~ 220	0.50	0.70	0.90	1.00
	330 ~ 820	0.60	0.75	0.95	1.00
	1000 ~ 1800	0.70	0.80	0.98	1.00