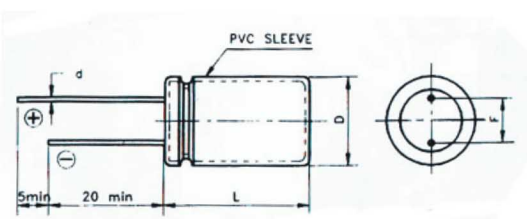


Features

- Load life of 2,000 hours at 85°C.
- Bi-polar, suitable for circuits whose polarity is sometimes reversed or unknown.
- Case Size larger than 5mm diameter has safety vents.

Characteristics

Item	Characteristics						
Operating temperature range	-40~+85°C						
Rated voltage range	6.3~100V						
Capacitance range	0.1-4,700 μ F						
Capacitance tolerance (at 20°C, 120Hz)	±20%(M)						
Leakage current(I) (at 20°C)	After 2 minute application of rated voltage. $I \leq 0.003CV + 3 \mu A$ Where C: Nominal capacitance in μ F, V: Rated voltage in V.						
Dissipation factor(Tan δ) (at 20°C, 120Hz)	W.V.(V)	6.3~10	16~25	35	50	63	100
	Tan δ (max.)	0.24	0.20	0.16	0.14	0.12	0.10
	For capacitance of more than 1,000 μ F, add 0.02 for every increase of 1,000 μ F.						
Low temperature characteristics (at 120Hz)	W.V.(v)		6.3	10~16	25~100		
	impedance ratio ZT/Z+20°C(max)	Z-25°C/Z+20°C	4	3	2		
		Z-40°C/Z+20°C	8	6	4		
Load life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage has been applied for 2,000 hours at 85°C with the polarity inverted every 250 hours.						
	Capacitance change		≤20% of the initial value				
	tan δ		≤200% of the initial specified value				
	I		≤The initial specified value				
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them at 85°C for 500 hours without voltage applied						
	Capacitance change		≤20% of the initial value				
	tan δ		≤150% of the initial specified value				
	I		≤200% of the initial specified value				
Others	Satisfies characteristic W of JIS C5141						

Dimensions


D±0.5	5	6.3	8	10	13	16	18
L	±1.0			±2.0			
	11	11	12	12	16	20	20
F±0.5	2.0	2.5	3.5	5.0		7.5	
d±0.05	0.5		0.6		0.8		

Ripple Current Multipliers

Frequency multiplying factor

Cap.(μ F)	Freq(Hz)				
	50	120	300	1k	10k
0.1~47	0.75	1.00	1.35	1.57	2.00
100~470	0.80	1.00	1.23	1.34	1.50
1,000~4,700	0.85	1.00	1.10	1.13	1.15

Temperature multiplying factor

Temperature (°C)	45	65	85
Factor	1.59	1.23	1.00

Case Size DxL(mm) and Maximun Ripple current(mA rms/at 85°C,120Hz)

W.V.(v)								
Cap.(μ F)	6.3	10	16	25	35	50	63	100
0.1						5×11 1.3		5×11 2.7
0.22						5×11 2.9		5×11 5.9
0.33						5×11 4.4		5×11 8.8
0.47						5×11 6.3		5×11 10
1						5×11 12		5×11 15
2.2						5×11 18	5×11 20	5×11 22
3.3						5×11 23	5×11 24	6.3×11 30
4.7				5×11 23	5×11 25	5×11 27	5×11 29	6.3×11 36
10			5×11 33	5×11 33	5×11 37	5×11 39	6.3×11 48	6.3×11 36
22		5×11 45	5×11 49	5×11 49	6.3×11 62	6.3×11 66	8×12 85	8×12 63
33	5×11 55	5×11 55	5×11 60	6.3×11 68	6.3×11 76	8×12 97	10×12 119	10×16 120
47	5×11 65	5×11 65	6.3×11 81	6.3×11 81	8×12 108	10×12 131	10×16 160	10×20 162
100	6.3×11 108	6.3×11 108	8×12 141	10×12 160	10×12 179	10×16 217	10×20 258	13×20 224
220	8×12 191	8×12 191	10×12 238	10×16 269	10×20 331	13×20 410	13×20 443	13×25 361
330	8×12 234	10×12 266	10×16 329	10×20 363	13×20 470	13×20 503	16×25 673	16×30 652
470	10×12 317	10×16 359	10×20 433	13×20 502	13×20 561	16×25 744	16×30 870	
1,000	10×20 577	10×20 668	13×20 732	13×25 807	16×25 1,015	18×35 1,343		
2,200	13×20 952	13×25 1,050	16×25 1,283	16×35 1,488				
3,300	13×25 1,239	16×25 1,393	16×35 1,745					
4,700	16×25 1,580	16×35 1,832						

Note: 10×12 can also be 8×15 as per customer's request.