

- High temperature 105°C, high ripple current and high reliability.
- Long life for 2000 hours.



● SPECIFICATION

Item	Characteristic															
Operation Temperature Range	-40 ~ +105°C							-25 ~ +105°C								
Rated Working Voltage	10 ~ 100VDC							160 ~ 450VDC								
Capacitance Tolerance (120Hz 20°C)	±20%(M)															
Leakage Current (20°C)	$I \leq 0.02CV$ or 5 (mA) *Whichever is smaller after 5 minutes I : Leakage Current(μA) C : Rated Capacitance(μF) V : Working Voltage(V)															
Surge Voltage (20°C)	W.V.	10	16	25	35	50	63	100	160	200	250	350	400	450		
	S.V.	13	20	32	44	63	79	125	200	250	300	400	450	500		
Dissipation Factor (tan δ) (120Hz 20°C)	φD	L	W.V.	10	16	25	35	50	63	100	160	200	250	350	400	450
				φ35	≦96	0.80	0.70	0.35	0.30	0.25	0.20	0.15	0.15	0.15	0.15	0.15
	φ51	≦100	0.80	0.70	0.40	0.35	0.30	0.25	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
		≦96	1.00	0.90	0.40	0.45	0.35	0.25	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	φ64	≦100	1.00	0.90	0.50	0.50	0.40	0.30	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
		≦96	1.20	1.00	0.60	0.55	0.40	0.30	0.20	0.15	0.15	0.15	0.15	0.15	0.15	0.15
φ77	≦100	1.20	1.00	0.80	0.60	0.45	0.35	0.20	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
	≦96	2.00	1.20	1.00	0.70	0.50	0.40	0.25	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
Low Temperature Stability	Impedance ratio at 120Hz															
	Rated Voltage (V)	10~100							160~450							
	-25°C / +20°C								8							
	-40°C / +20°C															
	12															
Load Life	After 2000 hours application of W.V. at +105°C, the capacitor shall meet the following limits.															
	Capacitance Change	≦±20% of initial value														
	Dissipation Factor	≦200% of initial specified value														
	Leakage current	≦initial specified value														
Shelf Life	At +105°C no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (with voltage treatment)															

● TERMINAL TYPE

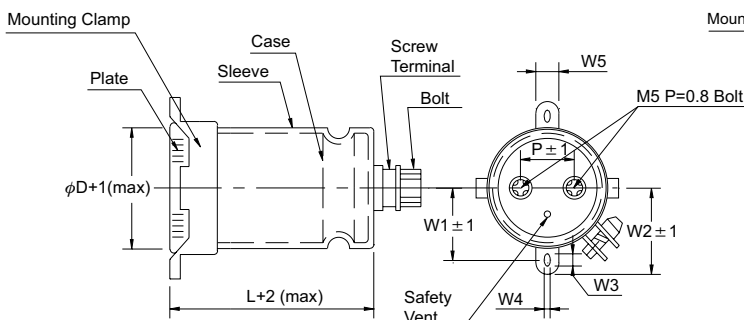
φD	W1	W2	W3	W4	W5	P
35	24.0	30.0	7.0	3.5	10.0	12.7
51	32.5	37.5	4.5	7.0	13.0	21.8
64	38.5	42.8	4.5	7.0	13.0	28.2
77	44.8	49.0	4.5	7.0	13.0	31.4
90	52.3	58.8	5.0	8.0	16.0	31.4

● RIPPLE CURRENT COEFFICIENTS

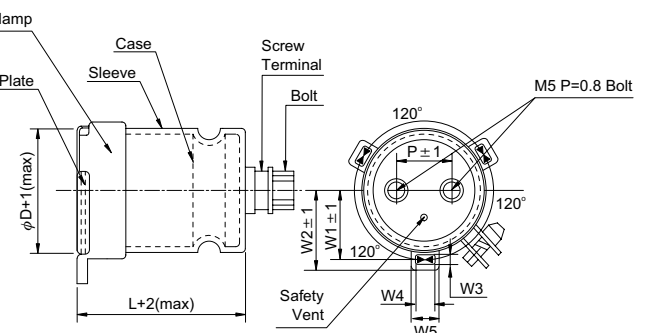
Frequency(Hz)	60	120	1k	10k	100k
W.V.	Multiplier				
10 ~ 35V	0.90	1.00	1.05	1.10	1.10
50 ~ 100V	0.90	1.00	1.10	1.15	1.15
160 ~ 450V	0.80	1.00	1.20	1.30	1.35

Temperature(°C)	45	55	70	85	105	
Multiplier	≦250V	3.00	2.50	2.00	1.40	1.00
	≧350V	2.50	2.00	1.50	1.20	1.00

(▲ φ35)



(▲ φ51, φ64, φ77, φ90)



● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
 Max ripple current : A(rms) 105°C 120Hz

μF	V(Code)		10 (1A)		16 (1C)		25 (1E)	
	Code	Item	DxL	R.C.	DxL	R.C.	DxL	R.C.
22000	223				35x50	3.25	35x60	4.59
33000	333		35x50	3.72	35x60	4.31	35x80	6.39
47000	473		35x60	4.81	35x80	5.84	35x90	8.04
56000	563		35x70	5.61	35x90	6.72	51x70	8.31
68000	683		35x80	6.57	51x70	6.66	51x90	10.21
100000	104		51x70	7.67	51x90	9.00	64x96	11.28
150000	154		51x90	10.46	64x96	11.22	64x115	12.94
220000	224		64x96	13.53	64x115	14.69	77x115	14.83
330000	334		64x115	17.92	77x115	18.24	90x131	19.94

μF	V(Code)		35 (1V)		50 (1H)		63 (1J)	
	Code	Item	DxL	R.C.	DxL	R.C.	DxL	R.C.
6800	682						35x70	3.31
8200	822				35x60	3.18	35x80	3.86
10000	103				35x70	3.75	35x90	4.50
15000	153		35x60	4.09	35x80	4.88	51x70	4.95
22000	223		35x80	5.63	51x70	5.57	51x90	6.68
33000	333		51x70	6.56	51x90	7.60	64x96	8.73
47000	473		51x80	8.29	64x96	9.48	64x115	10.43
56000	563		51x90	9.53	64x96	10.34	77x96	10.96
68000	683		51x115	11.11	64x115	11.62	77x115	13.03
100000	104		64x115	12.20	77x115	14.14	90x131	17.36
150000	154		77x115	13.90	90x131	19.02		
220000	224		90x131	17.42				

μF	V(Code)		100 (2A)		160 (2C)		200 (2D)	
	Code	Item	DxL	R.C.	DxL	R.C.	DxL	R.C.
1000	102				35x50	1.50	35x60	1.62
1500	152				35x60	1.98	35x70	2.12
2200	222				35x70	2.57	35x90	2.88
3300	332				35x90	3.52	51x80	3.49
4700	472				51x80	4.54	51x90	4.38
5600	562		35x90	4.59	51x90	5.22	64x96	5.34
6800	682		51x70	5.16	64x96	5.89	64x115	6.37
8200	822		51x80	6.00	64x96	6.46	77x96	6.85
10000	103		51x90	6.97	77x96	7.56	77x115	8.16
15000	153		64x96	7.57	77x130	10.54	90x131	10.98
22000	223		77x96	8.69	90x131	13.30		
33000	333		77x130	12.11				
47000	473		90x131	15.05				

● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)
 Max ripple current : A(rms) 105°C 120Hz

μF	V(Code)		250 (2E)		350 (2V)	
	Code	Item	DxL	R.C.	DxL	R.C.
1000	102		35x70	1.73	51x65	2.40
1500	152		35x90	2.38	51x70	3.03
2200	222		51x70	2.94	51x96	4.21
3300	332		51x90	4.01	64x96	5.47
3900	392		64x96	4.46	64x115	6.43
4700	472		64x115	5.29	64x130	7.45
5600	562		77x96	5.94	77x115	7.94
6800	682		77x115	7.07	77x130	9.23
8200	822		77x130	8.18	77x155	10.95
10000	103		77x155	9.76	90x157	12.25
15000	153		90x157	11.87		

μF	V(Code)		400 (2G)		450 (2W)	
	Code	Item	DxL	R.C.	DxL	R.C.
1000	102		51x70	2.47	51x90	2.94
1500	152		51x90	3.38	51x115	4.02
2200	222		64x96	4.46	64x115	5.17
3300	332		64x130	6.24	64x130	6.69
3900	392		64x155	7.34	77x121	7.82
4700	472		77x130	7.97	77x144	9.26
5600	562		77x155	9.39	90x145	11.06
6800	682		90x157	10.94	90x196	13.93
8200	822		90x157	12.01		
10000	103		90x196	14.64		