

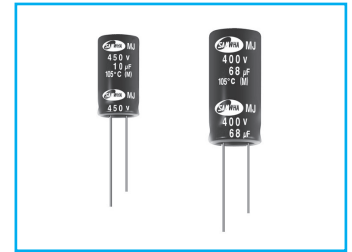
MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS



Upgrade

MJ

For PSU, High Ripple, 20000 hours at 105°C Series



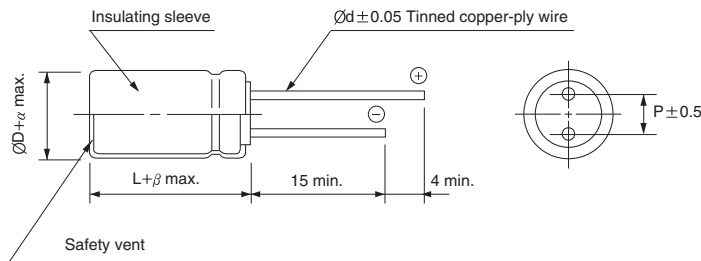
- High reliability withstanding 20000 hours load life at 105°C
- For power supply and adapter
- Complied to the RoHS directive



Item	Characteristics									
Operating temperature range	-40 ~ +105°C (160 ~ 450WV), -25 ~ +105°C (500WV)									
Leakage current max.	I = 0.04CV + 100µA (after 1 minute) I = 0.02CV + 25µA (after 5 minutes)									
Capacitance tolerance	±20% at 120Hz, 20°C									
Dissipation factor max. (at 120Hz, 20°C)	WV	160	200	250	350	400	420	450	500	
	tanδ	0.20			0.24					
Low temperature characteristics (Impedance ratio at 120Hz)	WV	160	200	250	350	400	420	450	500	
	Z-25°C/Z+20°C	3	3	3	3	6	6	6	6	
	Z-40°C/Z+20°C	4	4	4	6	6	6	6	-	
Load life	After an application of DC bias voltage plus the rated AC ripple current for 20000 hours at 105°C. The measurement shall meet the following limits. The DC voltage plus the peak AC voltage combined must not exceed the rated voltage. (where 15000 hours for Ø10)									
	Leakage current	Less than specified value								
	Capacitance change	Within ±20% of initial value								
	tanδ	Less than 200% of specified value								
Shelf life (at 105°C)	After 1000 hours no load test, leakage current, capacitance and tanδ are same as load life value. The measurement shall be performed at 20°C by the KS C IEC 60384 - 4									

DRAWING

Unit : mm



ØD	10	12.5	16	18	22
P	5.0	5.0	7.5	7.5	10.0
Ød	0.6	0.6	0.8	0.8	1.0
α	0.5				1.0
β	2.0				3.0

FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

µF	Frequency	120Hz	1kHz	10kHz	50kHz	100kHz ≤
3.3 ~ 82		1.00	1.75	2.25	2.35	2.50
		1.00	1.67	2.05	2.15	2.25

MINIATURE TYPES

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

MJ series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \diagdown WV	160		200		250		350	
6.8					10 × 12.5	119	10 × 12.5	105
10					10 × 12.5	160	10 × 16	149
15			10 × 12.5	150	10 × 16	220	10 × 20	197
22	10 × 12.5	221	10 × 16	243	10 × 20	240	12.5 × 20	297
	10 × 16	243						
27	10 × 16	264	10 × 20	280	10 × 20	270	12.5 × 20	314
33	10 × 16	270	10 × 20	308	12.5 × 20	323	12.5 × 25	325
39	10 × 20	320	10 × 25	350	12.5 × 20	354	12.5 × 25	352
47	10 × 20	369	12.5 × 20	440	12.5 × 25	460	12.5 × 30	451
68	12.5 × 25	480	12.5 × 25	594	12.5 × 30	610	16 × 31.5	623
82	12.5 × 25	525	12.5 × 30	640	16 × 25	680	18 × 25	688
			16 × 20	616				
100	12.5 × 25	575	16 × 25	717	16 × 25	717	18 × 31.5	817
120	12.5 × 30	670	16 × 25	785	16 × 31.5	804	18 × 35.5	924
150	16 × 25	825	16 × 31.5	813	16 × 35.5	902	18 × 40	1083
180	16 × 25	891	16 × 35.5	951	18 × 31.5	1012	18 × 45	1230
220	16 × 31.5	968	18 × 31.5	1100	18 × 35.5	1121		
	18 × 25	968						
270	16 × 35.5	1100	18 × 40	1290				
330	18 × 31.5	1231	18 × 45	1390				
470	18 × 45	1626						

μF \diagdown WV	400		420		450		500	
3.3							10 × 12.5	63
4.7					10 × 12.5	76	10 × 16	83
6.8	10 × 16	85			10 × 16	110	10 × 20	119
8.2	10 × 16	140	10 × 16	113	10 × 20	122	10 × 20	141
10	10 × 16	145	10 × 20	135	10 × 20	135	12.5 × 20	165
22	12.5 × 20	297	12.5 × 25	250	12.5 × 20	296	16 × 25	260
					12.5 × 25	296		
27	12.5 × 25	330	12.5 × 25	265	12.5 × 30	305	16 × 25	329
33	12.5 × 30	355	12.5 × 30	340	16 × 25	364	16 × 31.5	380
			16 × 20	345				
39	16 × 25	400	16 × 25	400	16 × 31.5	423	16 × 35.5	434
47	16 × 25	480	16 × 25	450	16 × 31.5	478	18 × 31.5	468
68	16 × 35.5	627	18 × 31.5	580	18 × 31.5	590	18 × 40	630
82	16 × 40	770	16 × 40	620	18 × 35.5	670	18 × 45	685
100	18 × 35.5	875	18 × 35.5	770	18 × 40	794	18 × 50	800
							22 × 41	800
120	18 × 40	1003	18 × 45	900	18 × 50	940	22 × 51	960
150	18 × 50	1192						

↑ ↑
 Ripple current (mA rms) at 105°C, 120Hz
 Case size $\varnothing D \times L$ (mm)