

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

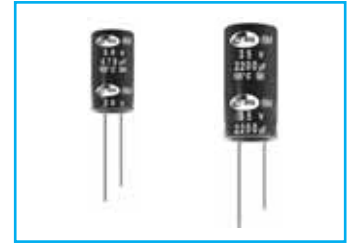


RM Wide Temperature Range, Miniaturized Series

- Miniature size compared with RD series
- High CV value
- Wide operating temperature range of -55 ~ +105°C
- Complied to the RoHS directive

M Miniaturized **S** Solvent Proof
WV ≤ 100V

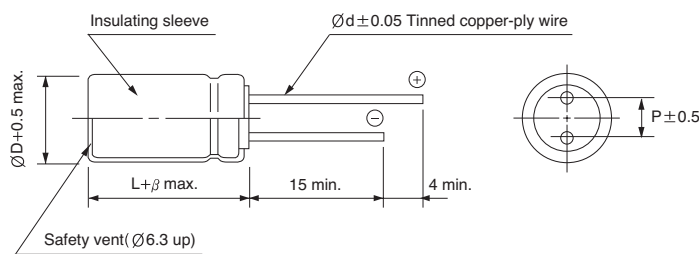
RD → **RM**
Miniature



Item	Characteristics										
Operating temperature range	WV	6.3 ~ 100 160 ~ 450									
	Temperature range	-55 ~ +105°C -40 ~ +105°C									
Leakage current max.	WV ≤ 100	WV > 100									
	I = 0.01CV or 3μA whichever is greater (after 2 min) I = 0.03CV or 4μA whichever is greater (after 1 min) I = 0.02CV+15μA (after 5 min)										
Capacitance tolerance	±20% at 120Hz, 20°C										
Dissipation factor max. (at 120Hz, 20°C)	Capacitance > 1000μF : tanδ increases by 0.02 for each 1000μF from below value.										
	WV	6.3	10	16	25	35	50	63	100	160~250	350~450
tanδ	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.15	0.20	
Low temperature characteristics (Impedance ratio at 120Hz)	WV	6.3	10	16	25	35	50~100	160	200~250	350~400	450
	Z-25°C/Z+20°C	5	4	3	2	2	2	3	4	6	8
	Z-40°C/Z+20°C	10	8	6	4	3	3	4	8	10	12
Load life (after application of the rated voltage for 2000 hours at 105°C)	Leakage current	Less than specified value									
	Capacitance change	Within ±20% of initial value									
	tanδ	Less than 200% of specified value									
	∅D	∅D ≤ 8					∅D ≥ 10				
Life time	1000 hours					2000 hours					
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 6035 clause 5.4.										

● DRAWING

Unit : mm



∅D	6.3	8	10	12.5	16	18
P	2.5	3.5	5.0	5.0	7.5	7.5
∅d	0.5	0.6	0.6	0.6	0.8	0.8
β	1.5		2.0			

● FREQUENCY COEFFICIENT OF PERMISSIBLE RIPPLE CURRENT

WV	μF	Frequency	60Hz	120Hz	1kHz	10kHz	50kHz	100kHz ≤
6.3~100		~ 47	0.75	1.00	1.55	2.00	2.30	2.00
		68 ~ 680	0.80	1.00	1.35	1.50	1.62	1.75
		1000 ~	0.85	1.00	1.15	1.15	1.32	1.50
160~500		~ 220	0.80	1.00	1.40	1.60	1.70	1.80
		330 ~	0.90	1.00	1.13	1.15	1.32	1.50

MINIATURE TYPES

MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RM series

● DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF \diagdown WV	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
1.0														6.3×11 13
2.2												6.3×11 23	8×11.5 28	8×11.5 23
3.3											6.3×11 30	8×11.5 34	8×11.5 34	10×12.5 33
4.7										6.3×11 34	8×11.5 40	8×11.5 40	10×12.5 47	10×12.5 39
6.8										8×11.5 49	10×12.5 56	10×12.5 56	10×16 62	10×16 52
10									8×11.5 59	8×11.5 59	10×12.5 68	10×16 75	10×16 75	10×20 68
15									10×12.5 84	10×12.5 84	10×16 92	10×16 92	12.5×20 115	12.5×20 96
22									10×12.5 102	10×16 111	10×16 111	12.5×20 139	12.5×20 140	12.5×25 127
33								8×11.5 139	10×16 136	10×20 149	10×20 149	12.5×25 180	16×25 211	16×25 117
47								10×12.5 190	10×20 177	12.5×20 203	12.5×20 203	16×25 252	16×25 252	16×31.5 231
68								10×12.5 229	12.5×25 267	16×20 279	12.5×25 267	16×31.5 303	16×31.5 332	16×35.5 291
100						8×11.5 218	8×11.5 239	10×16 304	12.5×25 324	16×25 368	16×25 368	18×31.5 432	18×35.5 453	18×40 397
150						8×11.5 267	10×12.5 293	10×20 372	16×25 450	16×25 450	16×31.5 450	18×35.5 554		
220				6.3×11 224	8×11.5 280	10×12.5 376	10×16 451	12.5×20 564	16×31.5 596	18×31.5 641	18×35.5 671			
330			6.3×11 248	8×11.5 324	10×12.5 400	10×16 504	10×20 603	16×25 856	18×31.5 784	18×40 863				
470		6.3×11 272	8×11.5 349	8×11.5 386	10×12.5 476	10×20 657	12.5×20 824	16×25 1021	18×40 1030					
680	6.3×11 295	8×11.5 386	8×11.5 420	10×12.5 540	10×16 627	12.5×20 905	12.5×25 1082	16×31.5 1344						
1000	8×11.5 422	8×11.5 469	10×12.5 592	10×16 717	10×20 829	12.5×25 1197	16×25 1490	18×35.5 1835						
1500	10×16 621	10×16 680	10×20 797	12.5×20 993	12.5×25 1136	16×31.5 1578	18×31.5 1812							
2200	10×16 713	10×16 774	10×20 898	12.5×25 1206	16×25 1426	16×31.5 1709	18×31.5 1935							
3300	10×20 909	10×20 978	12.5×20 1184	16×25 1562	16×31.5 1769	18×35.5 2152								
4700	12.5×20 1189	12.5×20 1272	12.5×25 1459	16×25 1752	16×35.5 2073									
6800	12.5×25 1445	16×25 1529	16×25 1811	16×35.5 2176	18×40 2510	← Case size $\varnothing D \times L$ (mm) ← Ripple current (mA rms) at 105°C, 120Hz								
10000	16×25 1807	16×25 1892	16×31.5 2140	18×35.5 2497										
15000	16×31.5 2128	16×35.5 2313	18×35.5 2545											
22000	18×31.5 2411	18×35.5 2595												