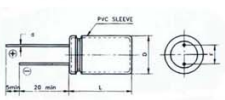
Features

- Load life of 2,000 hours at 85℃.
- standard type.
- Genetal purpose.
- Case Size larger than 5mm diamter has safety vents.

Characteristics

Item	Characteristics										
Operating temperature range	-40～+85℃(for 6.3V to 250V) -25～+85℃(for 350V to 450V)										
Rated voltage range	6.3～450V										
Capacitance range	0.1-15,000μF										
Capacitance tolerance (at20℃,120Hz)	±20%(M)										
Leakage current(I) (at20℃)	After 2 minute application of rated voltage. I≤0.01CV or 3μA,whichever is greater (for 6.3v to 100v).						After 2 minute application of rated voltage. I≤0.02CV+20μA(for 160v to 450v).				
	Where C: Nominal capacitance in μF,V:Rated voltage in V.										
Dissipation factor(Tan δ) (at 20℃,120Hz)	W.V.(V)	6.3	10	16	25	35	50	63	100	160-250	350-450
	Tan δ (max.)	0.24	0.20	0.16	0.14	0.12	0.10	0.09	0.08	0.15	0.20
	For capcitance of more than 1,000μF,add 0.02 for every increase of 1,000μF.										
Low temperature characteristics (at 120Hz)	W.V.(v)		6.3	10	16～100		160～250		350～450		
	impedance ratio ZT/Z+20℃(max)	Z-25℃/Z+20℃	4	3	2		4		6		
		Z-40℃/Z+20℃	8	6	4		8		-		
Load life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage has been applied for 2,000 hours at 85℃.										
	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℃ after exposing them at 85℃ 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	22
L	±1.0				±2.0			
	11	11	12	12	16	20	25	25	30	35	35	40	35	40
F±0.5	2.0	2.5	3.5	5.0		7.5		10.0	
d±0.05	0.5			0.6		0.8		

Ripple Current Multipliers

Frequency multiplying factor

W.V.(v)	Freq(Hz) / Cap.(μF)	50	120	300	1k	10k
6.3～100	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
	1,000～15,000	0.85	1.00	1.10	1.13	1.15
160～450	0.47～470	0.80	1.00	1.25	1.40	1.60

Temperature multiplying factor

Temperature (℃)	45	65	85
Factor	1.59	1.23	1.00

GM SERIES ALUMINUM ELECTROLYTIC CAPACITORS

Case Size DxL(mm) and Maximun Ripple current(mA/at85℃,120Hz)

W.V.(v) / Cap.(μF)	6.3	10	16	25	35	50	63	100	160	200	250	350	400	450
0.1						5×11 1.3		5×11 2.6						
0.22						5×11 2.9		5×11 5.8						
0.33						5×11 4.3		5×11 8.7						
0.47						5×11 6.3		5×11 11	5×11 8.2	5×11 8.2	5×11 8.2	6.3×11 8.1	6.3×11 8.1	6.3×11 8.1
1						5×11 13		5×11 16	5×11 12	5×11 12	6.3×11 14	6.3×11 12	8×12 14	8×12 14
2.2						5×11 22		5×11 24	6.3×11 20	6.3×11 20	6.3×11 20	8×12 21	10×12 24	10×12 24
3.3						5×11 27		5×11 30	6.3×11 25	6.3×11 25	8×12 30	10×12 29	10×16 33	10×16 33
4.7				5×11 27	5×11 29	5×11 32	5×11 34	5×11 36	8×12 35	8×12 35	10×12 40	10×16 39	10×16 39	10×20 43
10			5×11 37	5×11 39	5×11 42	5×11 47	5×11 49	6.3×11 59	10×12 59	10×12 59	10×16 66	10×12 63	10×12 63	13×20 73
22		5×11 49	5×11 55	5×11 58	5×11 63	5×11 69	6.3×11 83	8×12 105	10×16 98	10×20 108	10×20 108	13×20 109	13×25 120	16×25 135
33	5×11 55	5×11 60	5×11 67	5×11 71	5×11 77	6.3×11 96	6.3×11 101	10×12 146	10×20 133	13×20 154	13×20 154	16×25 165	16×25 165	16×30 178
47	5×11 65	5×11 71	5×11 80	5×11 85	6.3×11 105	6.3×11 115	8×12 144	10×16 196	13×20 183	13×20 183	13×25 202	16×30 213	16×35 228	16×35 228
100	5×11 95	5×11 104	6.3×11 132	6.3×11 142	8×12 182	8×12 199	10×12 239	10×20 316	16×25 331	16×25 331	16×30 359	18×40 355	22×35 398	22×35 398
220	6.3×11 160	6.3×11 176	8×12 234	8×12 250	10×12 307	10×16 380	10×20 442	13×25 599	18×35 608	18×40 646	22×35 681			
330	6.3×11 196	8×12 256	8×12 286	10×12 348	10×16 425	10×20 513	13×20 627	16×25 824	22×35 834	22×35 834				
470	8×12 279	8×12 306	10×12 389	10×16 470	10×16 507	13×20 710	13×25 825	16×30 1,065	22×40 1,055					
1,000	10×12 463	10×16 573	10×16 641	13×20 875	13×20 945	13×25 1,141	16×30 1,465	22×35 1,988						
2,200	10×12 822	13×20 1,035	13×20 1,145	13×25 1,338	16×25 1,609	18×35 2,151	22×35 2,515							
3,300	13×20 1,124	13×20 1,214	13×25 1,197	16×25 1,738	16×35 2,137	18×40 2,894	22×40 3,003							
4,700	13×20 1,275	13×25 1,506	16×25 1,835	16×35 2,226	18×40 2,652	22×40 3,134								
6,800	16×25 1,789	16×25 1,901	16×35 2,362	18×40 2,781	22×40 3,241									
10,000	16×30 2,144	16×35 2,414	18×40 2,892	22×35 3,144										
15,000	18×35 2,698	18×40 2,981	22×35 3,284											

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