LARGE SIZED ALUMINUM ELECTROLYTIC CAPACITORS

SMH(RGB) Series

• 85℃ 2,000Hrs assured.

- Non-solvent proof.
- General.
- Downsized of SME series
- For UPS
- **RoHS compliant.**

SME → SMH

Downsized

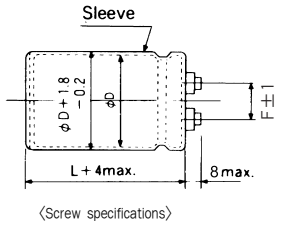
SPECIFICATIONS

Item	Characteristics	
Rated Voltage Range	10 ~ 100 VDC	160 ~ 250 VDC
Operating Temperature Range	-40 ~ +85℃	-25 ~ +85℃
Capacitance Tolerance	±20% (M)	(at 20℃, 120Hz)
Leakage Current	I=0.02CV or 5mA, whichever is smaller. Where, I: Max. Leakage current (μA) C: Nominal capacitance (μF) V: Rated voltage (VDC) (at 20℃, 5 minutes)	
Dissipation Factor (Tanδ)	Tanδ shall not exceed the values shown in the RATINGS. (at 20℃, 120Hz)	
Temperature Characteristics (Capacitance change ratio)	C(-25℃)/C(20℃)≧0.7 (at 120Hz)	
Insulation Withstanding Voltage	When a voltage of 2000VAC is applied for one minute between the terminals shorted each other and the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.	
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20℃. after subjected to DC voltage with the rated ripple current is applied 2,000 hours at 85℃. Capacitance change ≦ ±20% of the initial value Tanδ ≦ 200% of the initial specified value Leakage current ≦ 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. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurement. Capacitance change ≦ ±20% of the initial value Tanδ ≦ 200% of the initial specified value Leakage current ≦ The initial specified value	
Others	Satisfied characteristics W of KS C 6421	

DIMENSIONS OF SMH Series

Unit(mm)

Marking:BLACK SLEEVE, SILVER INK.



〈Screw specifications〉

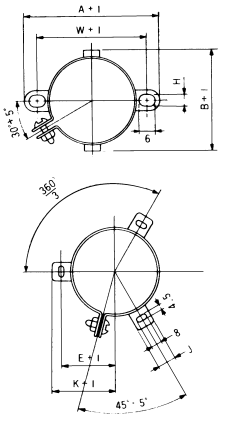
- Plus hexagon-headed screw: M5×0.8×12
- Maximum screw tightening torque:3.23N · m(33kg · cm)

B type mounting clamp

ØD	A	B	W	H	F
35	58	44	48	3.5	12.7
50	78	64	68	4.5	22.4
63.5	90	76	80	4.5	28.0
76.5	104.5	90	93.5	4.5	31.5

C type mounting clamp

ØD	E	K	J	F
50	32.5	37.0	14	22.4
63.5	38.1	43.5	14	28.0
76.5	44.5	50.0	14	31.5
89	50.8	56.5	16	31.5



RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multiplying Factor

Rated voltage (VDC)	ØD(mm)	Frequency (Hz)					
		60	120	300	1k	10k	50k
10~50	Ø35~Ø89	0.95	1.00	1.03	1.05	1.09	1.12
63	Ø35	0.90	1.00	1.06	1.10	1.18	1.22
	Ø50~Ø89	0.95	1.00	1.03	1.05	1.09	1.12
100	Ø35	0.82	1.00	1.12	1.22	1.30	1.33
	Ø50	0.90	1.00	1.06	1.10	1.18	1.22
	Ø63.5~Ø89	0.95	1.00	1.03	1.05	1.09	1.12
160~250	Ø35	0.80	1.00	1.19	1.34	1.46	1.52
	Ø50, Ø63.5	0.81	1.00	1.14	1.26	1.36	1.41
	Ø76.5~Ø89	0.82	1.00	1.12	1.22	1.30	1.33

CASE CODE

Case Code	ØD (mm)	L (mm)	Case Code	ØD (mm)	L (mm)
A5	35	50	C12	50	120
A6	35	60	D10	63.5	100
A8	35	80	D12	63.5	120
A10	35	100	E10	76.5	100
A12	35	120	E12	76.5	120
C8	50	80	E14	76.5	140
C10	50	100	F14	89	140

RATINGS OF SMH Series

μF \ VDC	10(1A)			16(1C)			25(1E)			35(1V)			50(1H)			63(1J)		
5,600																A5	3.0	0.20
6,800																		
8,200																		
10,000													A5	4.1	0.25	A6	4.0	0.25
12,000																		
15,000										A5	3.9	0.30				A8	5.0	0.25
18,000							A5	4.0	0.35				A8	5.2	0.25	A10	5.0	0.25
22,000										A8	5.4	0.35	A8	5.6	0.30	C8	6.5	0.30
27,000				A5	4.2	0.45							A10	6.3	0.35			
33,000										A8	6.0	0.40				C8	7.7	0.35
39,000	A5	4.7	0.60				A8	6.5	0.40	A10	6.7	0.40	C8	7.4	0.40	C10	9.1	0.35
47,000							A8	7.0	0.40	A10	8.0	0.45	C10	8.1	0.40	D10	10.2	0.40
56,000				A8	6.5	0.60	A10	7.9	0.45				C10	9.8	0.40			
68,000										C8	9.0	0.50	C10	10.5	0.45	D10	12.6	0.40
82,000	A8	7.4	0.60	A10	8.0	0.70	C8	9.7	0.50	C10	10.3	0.55	D10	12.8	0.50			
100,000	A8	7.6	0.70	A10	9.1	0.70	C8	10.3	0.60							E10	16.2	0.45
120,000	A10	8.9	0.70	C8	9.6	0.80	C10	12.2	0.60	C12	12.8	0.60	C12	14.2	0.60	E12	18.1	0.50
150,000	C6	9.8	0.90	C10	11.2	0.90				D10	14.0	0.70	E10	17.2	0.60	F14	22.0	0.55
180,000							D10	14.7	0.75	D12	16.6	0.70	E12	18.5	0.70			
220,000	C8	11.5	1.00	C10	13.5	1.00	D12	16.8	0.80	E10	17.3	0.75						
270,000	C10	12.9	1.20	D10	15.3	1.20	E10	18.3	0.90	E10	18.8	0.80	F14	24.6	0.80			
330,000				D12	17.1	1.30	E10	19.7	1.00	E12	21.4	0.90						
390,000	D10	15.3	1.50	E10	18.0	1.60	E12	21.0	1.20									
470,000	D12	16.0	2.00	E10	18.3	1.80				F14	28.3	1.00						
560,000	E10	17.3	2.50	E12	20.7	2.00	F14	25.8	1.50									
680,000	E12	18.7	3.00															

μF \ VDC	100(2A)			160(2C)			200(2D)			250(2E)			350(2V)~450(2G)
560										A5	1.3	0.15	
680										A5	1.4	0.15	
820							A5	1.6	0.15				
1,000													
1,200				A5	2.0	0.15				A8	2.3	0.15	
1,500										A8	2.9	0.15	
1,800							A8	2.8	0.15	A10	3.1	0.15	
2,200	A5	2.5	0.10	A8	3.4	0.15	A8	3.4	0.15	C8	3.7	0.15	
2,700				A8	3.5	0.15	A10	3.8	0.15				Please refer to RWF Series
3,300				A10	4.3	0.15	C8	4.5	0.15	C8	4.8	0.15	
3,900										C10	5.6	0.15	
4,700	A6	3.2	0.15	C8	5.6	0.20	C8	6.7	0.15	D10	6.6	0.20	
5,600							C10	7.8	0.15				
6,800	A8	4.2	0.15	C10	7.1	0.20				D12	8.3	0.20	
8,200	A10	4.8	0.15	C10	8.1	0.20	D10	10.0	0.20				
10,000	C8	5.2	0.20	D10	9.8	0.20	D10	10.5	0.20	E10	10.5	0.20	
12,000				D10	10.3	0.20	E10	11.5	0.20	E12	12.4	0.20	
15,000				E10	12.7	0.20	E10	12.2	0.20	F14	14.9	0.20	
18,000	C10	7.7	0.20	E10	13.3	0.20	E12	14.3	0.20				
22,000	D10	8.6	0.25	E12	15.8	0.20	F14	15.6	0.25				
27,000	D10	9.8	0.25										
33,000	E10	11.1	0.25	F14	18.9	0.25							
39,000	E10	11.8	0.25										
47,000	E12	13.6	0.25										
68,000	F14	18.0	0.30										

Tan δ(Max.)
Rated Ripple Current (Arms/85℃, 120Hz)
Case code