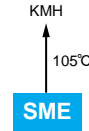


# SME Series

- Endurance with ripple current : 2,000 hours at 85°C
- RoHS Compliant



## ◆SPECIFICATIONS

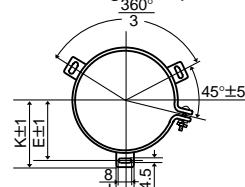
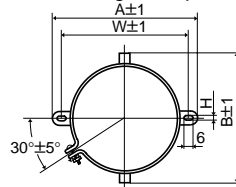
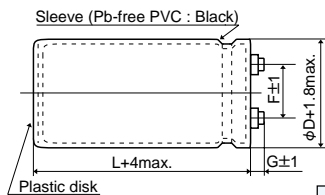
Items	Characteristics	
Category		
Temperature Range	-40 to +85°C (10 to 100V <sub>dc</sub> ) -25 to +85°C (160 to 250V <sub>dc</sub> )	
Rated Voltage Range	10 to 250V <sub>dc</sub>	
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)	
Leakage Current	I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes)	
Dissipation Factor (tanδ)	Shall not exceed the values shown in the STANDARD RATINGS (at 20°C, 120Hz)	
Low Temperature Characteristics	Capacitance change C(-25°C)/C(+20°C)≥0.7 (at 120Hz)	
Insulation Resistance	When measured between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of 500V <sub>dc</sub> , the insulation resistance shall not be less than 100MΩ.	
Insulation Withstanding Voltage	When a voltage of 2,000Vac is applied for 1 minute between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage.	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 85°C.	
	Capacitance change	≤±20% of the initial value
	D.F. (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°C after exposing them for 500 hours at 85°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.	
	Capacitance change	≤±20% of the initial value
	D.F. (tanδ)	≤150% of the initial specified value
	Leakage current	≤The initial specified value

## ◆DIMENSIONS (Screw-Mount) [mm]

●Terminal Code : LG

●Mounting Clamp Code : B

●Mounting Clamp Code : C



φD	A	B	W	H	F
35	58.0	44.0	48.0	3.5	12.7
50	78.0	64.0	68.0	4.5	22.4
63.5	90.0	76.0	80.0	4.5	28.0
76	104.5	90.0	93.5	4.5	31.5

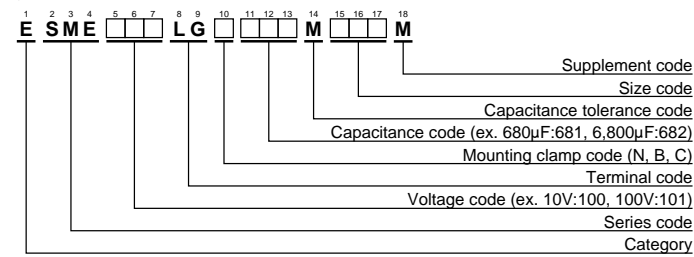
φD	E	K	J	F
50	32.5	37.0	14.0	22.4
63.5	38.1	43.5	14.0	28.0
76	44.5	50.0	14.0	31.5
89	50.8	56.5	16.0	31.5

<Screw specifications>  
Plus hexagon-headed screw:  
M5×0.8×10  
Maximum screw tightening torque:  
3.23Nm

φ35 to φ63.5 : G=6  
φ76 & φ89 : G=5

\* The screw and the mounting clamp are separately supplied and not attached to the product.

## ◆PART NUMBERING SYSTEM



Please refer to "Product code guide (screw-mount terminal type)"

## ◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Rated voltage (V <sub>dc</sub> )	Case diameter (mm)	Frequency (Hz)					
		50	120	300	1k	10k	50k
10 to 50	φ35 to φ89	0.95	1.00	1.03	1.05	1.09	1.12
	φ35	0.90	1.00	1.06	1.10	1.18	1.22
63 & 80	φ50 to φ89	0.95	1.00	1.03	1.05	1.09	1.12
	φ35	0.82	1.00	1.12	1.22	1.30	1.33
100	φ50	0.90	1.00	1.06	1.10	1.18	1.22
	φ63.5 to φ89	0.95	1.00	1.03	1.05	1.09	1.12
160 to 250	φ35	0.80	1.00	1.19	1.34	1.46	1.52
	φ50 & φ63.5	0.81	1.00	1.14	1.26	1.36	1.41
	φ76 & φ89	0.82	1.00	1.12	1.22	1.30	1.33

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.

When long life performance is required in actual use, the rms ripple current has to be reduced.

### ◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (Arms/85°C,120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (Arms/85°C,120Hz)	Part No.	
10	39,000	35×50	0.60	4.70	ESME100LGB393MA50M	63	47,000	63.5×100	0.40	10.2	ESME630LGC473MDA0M	
	82,000	35×80	0.60	7.40	ESME100LGB823MA80M		68,000	63.5×120	0.40	13.3	ESME630LGC683MDC0M	
	100,000	35×100	0.70	8.00	ESME100LGB104MAA0M		100,000	76×120	0.45	17.1	ESME630LGC104MEC0M	
	120,000	35×120	0.70	9.40	ESME100LGB124MAC0M		120,000	76×140	0.50	19.0	ESME630LGC124MEE0M	
	150,000	50×80	0.90	9.80	ESME100LGC154MC80M		150,000	89×140	0.55	22.0	ESME630LGC154MFE0M	
	220,000	50×100	1.00	12.1	ESME100LGC224MCA0M		80	3,300	35×50	0.15	2.50	ESME800LGB332MA50M
	270,000	50×120	1.20	13.6	ESME100LGC274MCC0M			6,800	35×80	0.20	3.70	ESME800LGB682MA80M
	390,000	63.5×100	1.50	15.3	ESME100LGC394MDA0M			10,000	35×100	0.20	4.90	ESME800LGB103MAA0M
	470,000	63.5×120	2.00	16.0	ESME100LGC474MDC0M			12,000	35×120	0.20	5.40	ESME800LGB123MAC0M
	560,000	76×100	2.50	17.3	ESME100LGC564MEA0M			15,000	50×80	0.25	6.00	ESME800LGC153MC80M
680,000	76×120	3.00	18.7	ESME100LGC684MEC0M	22,000	50×100		0.30	7.10	ESME800LGC223MCA0M		
16	27,000	35×50	0.45	4.20	ESME160LGB273MA50M	27,000		50×120	0.30	8.60	ESME800LGC273MCC0M	
	56,000	35×80	0.60	6.50	ESME160LGB563MA80M	33,000		63.5×100	0.35	9.30	ESME800LGC333MDA0M	
	82,000	35×100	0.70	8.00	ESME160LGB823MAA0M	47,000		63.5×120	0.35	12.0	ESME800LGC473MDC0M	
	100,000	35×120	0.70	9.60	ESME160LGB104MAC0M	68,000		76×120	0.35	15.4	ESME800LGC683MEC0M	
	120,000	50×80	0.80	9.60	ESME160LGC124MC80M	82,000	76×140	0.35	18.1	ESME800LGC823MEE0M		
	150,000	50×100	0.90	11.2	ESME160LGC154MCA0M	100,000	89×140	0.40	21.0	ESME800LGC104MFE0M		
	220,000	50×120	1.00	14.2	ESME160LGC224MCC0M	100	2,200	35×50	0.10	2.50	ESME101LGB222MA50M	
	270,000	63.5×100	1.20	15.3	ESME160LGC274MDA0M		4,700	35×80	0.15	3.40	ESME101LGB472MA80M	
	330,000	63.5×120	1.30	17.1	ESME160LGC334MDC0M		6,800	35×100	0.15	4.20	ESME101LGB682MAA0M	
	390,000	76×100	1.60	18.0	ESME160LGC394MEA0M		8,200	35×120	0.15	5.00	ESME101LGB822MAC0M	
470,000	76×120	1.80	19.3	ESME160LGC474MEC0M	10,000		50×80	0.20	5.20	ESME101LGC103MC80M		
560,000	76×140	2.00	20.7	ESME160LGC564MEE0M	18,000		50×120	0.20	8.10	ESME101LGC183MCC0M		
25	18,000	35×50	0.35	4.00	ESME250LGB183MA50M		22,000	63.5×100	0.25	8.60	ESME101LGC223MDA0M	
	39,000	35×80	0.40	6.20	ESME250LGB393MA80M		27,000	63.5×120	0.25	10.3	ESME101LGC273MDC0M	
	47,000	35×100	0.40	7.40	ESME250LGB473MAA0M		33,000	76×100	0.25	11.1	ESME101LGC333MEA0M	
	56,000	35×120	0.45	8.30	ESME250LGB563MAC0M		39,000	76×120	0.25	12.4	ESME101LGC393MEC0M	
	82,000	50×80	0.50	9.70	ESME250LGC823MC80M	47,000	76×140	0.25	14.3	ESME101LGC473MEE0M		
	100,000	50×100	0.60	10.8	ESME250LGC104MCA0M	68,000	89×140	0.30	18.0	ESME101LGC683MFE0M		
	120,000	50×120	0.60	12.8	ESME250LGC124MCC0M	160	1,200	35×50	0.15	2.00	ESME161LGB122MA50M	
	180,000	63.5×100	0.75	14.7	ESME250LGC184MDA0M		2,200	35×80	0.15	3.40	ESME161LGB222MA80M	
	220,000	63.5×120	0.80	16.8	ESME250LGC224MDC0M		2,700	35×100	0.15	3.70	ESME161LGB272MAA0M	
	270,000	76×100	0.90	18.3	ESME250LGC274MEA0M		3,300	35×120	0.15	4.50	ESME161LGB332MAC0M	
330,000	76×120	1.00	20.7	ESME250LGC334MEC0M	4,700		50×80	0.20	5.60	ESME161LGC472MC80M		
390,000	76×140	1.20	22.1	ESME250LGC394MEE0M	6,800		50×100	0.20	7.50	ESME161LGC682MCA0M		
560,000	89×140	1.50	25.8	ESME250LGC564MFE0M	8,200		50×120	0.20	8.10	ESME161LGC822MCC0M		
35	15,000	35×50	0.30	3.90	ESME350LGB153MA50M		10,000	63.5×100	0.20	9.80	ESME161LGC103MDA0M	
	33,000	35×80	0.40	6.00	ESME350LGB333MA80M		12,000	63.5×120	0.20	10.8	ESME161LGC123MDC0M	
	39,000	35×100	0.40	7.00	ESME350LGB393MAA0M		15,000	76×100	0.20	12.7	ESME161LGC153MEA0M	
	47,000	35×120	0.45	8.00	ESME350LGB473MAC0M	18,000	76×120	0.20	14.0	ESME161LGC183MEC0M		
	68,000	50×80	0.50	9.00	ESME350LGC683MC80M	22,000	76×140	0.20	16.6	ESME161LGC223MEE0M		
	82,000	50×100	0.55	10.3	ESME350LGC823MCA0M	33,000	89×140	0.25	18.9	ESME161LGC333MFE0M		
	120,000	50×120	0.60	12.8	ESME350LGC124MCC0M	200	820	35×50	0.15	1.60	ESME201LGB821MA50M	
	150,000	63.5×100	0.70	14.0	ESME350LGC154MDA0M		1,800	35×80	0.15	2.80	ESME201LGB182MA80M	
	180,000	63.5×120	0.70	16.6	ESME350LGC184MDC0M		2,200	35×100	0.15	3.60	ESME201LGB222MAA0M	
	220,000	76×100	0.75	17.3	ESME350LGC224MEA0M		2,700	35×120	0.15	4.00	ESME201LGB272MAC0M	
270,000	76×120	0.80	19.8	ESME350LGC274MEC0M	3,300		50×80	0.15	4.50	ESME201LGC332MC80M		
330,000	76×140	0.90	22.5	ESME350LGC334MEE0M	4,700		50×100	0.15	7.10	ESME201LGC472MCA0M		
470,000	89×140	1.00	28.3	ESME350LGC474MFE0M	5,600		50×120	0.15	8.20	ESME201LGC562MCC0M		
50	10,000	35×50	0.25	4.10	ESME500LGB103MA50M		8,200	63.5×100	0.20	10.0	ESME201LGC822MDA0M	
	18,000	35×80	0.25	5.20	ESME500LGB183MA80M		10,000	63.5×120	0.20	11.0	ESME201LGC103MDC0M	
	22,000	35×100	0.30	5.90	ESME500LGB223MAA0M		12,000	76×100	0.20	11.5	ESME201LGC123MEA0M	
	27,000	35×120	0.35	6.60	ESME500LGB273MAC0M	15,000	76×120	0.20	12.8	ESME201LGC153MEC0M		
	39,000	50×80	0.40	7.40	ESME500LGC393MC80M	18,000	76×140	0.20	15.0	ESME201LGC183MEE0M		
	56,000	50×100	0.40	9.80	ESME500LGC563MCA0M	22,000	89×140	0.25	15.6	ESME201LGC223MFE0M		
	68,000	50×120	0.45	11.1	ESME500LGC683MCC0M	250	560	35×50	0.15	1.30	ESME251LGB561MA50M	
	82,000	63.5×100	0.50	12.2	ESME500LGC823MDA0M		1,200	35×80	0.15	2.30	ESME251LGB122MA80M	
	120,000	63.5×120	0.50	16.0	ESME500LGC124MDC0M		1,500	35×100	0.15	3.00	ESME251LGB152MAA0M	
	150,000	76×100	0.60	18.1	ESME500LGC154MEC0M		1,800	35×120	0.15	3.30	ESME251LGB182MAC0M	
180,000	76×140	0.70	19.5	ESME500LGC184MEE0M	2,200		50×80	0.15	3.70	ESME251LGC222MC80M		
270,000	89×140	0.80	24.6	ESME500LGC274MFE0M	3,300		50×100	0.15	5.10	ESME251LGC332MCA0M		
63	5,600	35×50	0.20	3.00	ESME630LGB562MA50M		3,900	50×120	0.15	5.90	ESME251LGC392MCC0M	
	10,000	35×80	0.25	4.00	ESME630LGB103MA80M		4,700	63.5×100	0.20	6.90	ESME251LGC472MDA0M	
	15,000	35×100	0.25	5.30	ESME630LGB153MAA0M		6,800	63.5×120	0.20	8.70	ESME251LGC682MDC0M	
	18,000	35×120	0.25	6.20	ESME630LGB183MAC0M		10,000	76×120	0.20	11.1	ESME251LGC103MEC0M	
	22,000	50×80	0.30	6.50	ESME630LGC223MC80M	12,000	76×140	0.20	13.0	ESME251LGC123MEE0M		
	33,000	50×100	0.35	8.10	ESME630LGC333MCA0M	15,000	89×140	0.20	14.9	ESME251LGC153MFE0M		
39,000	50×120	0.35	9.60	ESME630LGC393MCC0M								