

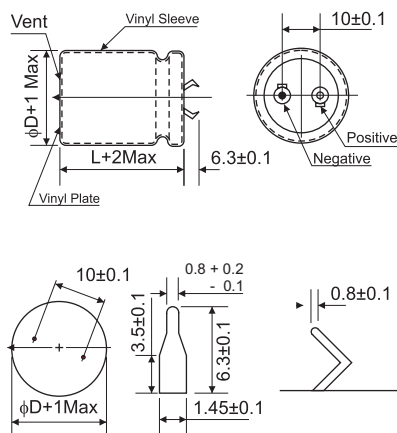
FEATURES

- Has a snap-in terminal which can solder to PCB directly and need not fixture to save processing time.
- Suitable for electronic equipment with medium-high voltage circuits. Printed circuit board terminal snap-in type and lug terminal type available.
- 3,000 Hour Life

SPECIFICATIONS

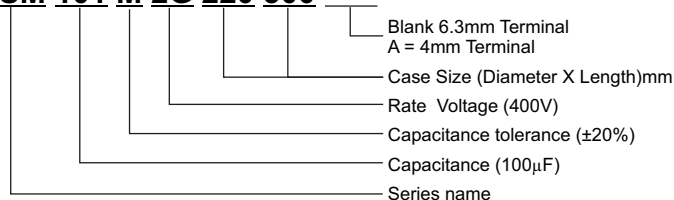
Item	Performance													
Operating Temp. Range	-40°C ~ +105°C													
Capacitance Tolerance	±20% (at 120Hz, 20°C)													
Leakage Current (at 20°C)	I=0.02CV or 1.5mA whichever is smaller (after 5 minutes) Where, C=rated capacitance in μF. V=rated DC working voltage.													
Dissipation Factor (Tan δ at 120Hz, 20°C)	Rated Voltage	16	25	35	50	63	100	160	200	250	350	400	450	
	Tan δ (max)	0.40	0.30	0.25	0.20	0.15	0.10*	0.15	0.10*	0.10*	0.15	0.15	0.15	
*0.15 for φD = 35mm														
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.													
	Rated Voltage	16	25	35	50	63	100	160	200	250	350	400	450	
	Impedance Ratio	Z(-25°C) / Z(+20°C)	4	3	3	2	2	2	4	4	4	4	8	8
		Z(-40°C) / Z(+20°C)	15	10	8	6	6	5	4	8	10	16	18	20
Load Life Test	Test Time	3000 hours												
	Capacitance Change	Within ±20% of initial value												
	Dissipation Factor	Less than 200% of specified value												
	Leakage Current	Within specified value												
	The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 3000 hrs at 105°C													
Shelf Life Test	Test Time	1000 hours												
	Capacitance Change	Within ±20% of initial value												
	Dissipation Factor	Less than 150% of specified value												
	Leakage Current	Within specified value												
	The above specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hrs at 105°C without voltage applied.													
Ripple Current & Frequency Multipliers	WV (V) \ Freq (Hz)	50/60	120	300	1K	10K up								
	Multiplier	0.8	1.0	1.1	1.3	1.4								
Ripple Current & Temperature Multipliers	Temperature (°C)	40	60	70	85	105								
	Multiplier	2.5	2.2	2.0	1.8	1.0								
Standards	Satisfies Characteristics W of JIS C 5141													

SNAP-IN TERMINAL TYPE



PART NUMBER EXAMPLE

LSM 101 M 2G 220 300



DIMENSIONS & PERMISSABLE RIPPLE CURRENT

Dimension: DxL (mm); Ripple Current: A/RMS at 120Hz, 105°C

μF	VDC	Code	16V (1C)				25V (1E)				35V (1V)				50V (1H)			
			ΦD = 22	25	30	35	22	25	30	35	22	25	30	35	22	25	30	35
1500	152													Dimension => Ripple Current =>	22 x 25 1.22			
1800	182																	
2200	222									22 x 25 1.14				22 x 30 1.59	25 x 25			
3300	332					22 x 25 1.25				22 x 30 1.51	25 x 25			22 x 35 1.93	25 x 30	30 x 25		
4700	472	22 x 25 1.3				22 x 30 1.61	25 x 25 1.61			22 x 25 1.92	25 x 30	30 x 25		22 x 45 2.43	25 x 35	30 x 30	35 x 25	
6800	682	22 x 35 1.8	25 x 30			22 x 35 1.91	25 x 30 1.91	30 x 25		22 x 45 2.31	25 x 40	30 x 30	35 x 25		25 x 45	30 x 35	35 x 30	
10000	103	22 x 45 2.34	25 x 35	30 x 25		22 x 45 1.43	25 x 30 2.4	30 x 30	35 x 25 2.42		25 x 45	30 x 35	35 x 30			30 x 45	35 x 40	
15000	153		25 x 45	30 x 35	35 x 30		25 x 45 3.12	30 x 35	35 x 30 3.11			30 x 45	35 x 40					
22000	223			30 x 35	35 x 35			30 x 45	35 x 40 3.85				35 x 45					

μF	VDC	Code	63V (1J)				80V (1K)				100V (2A)				160V (2C)			
			ΦD = 22	25	30	35	22	25	30	35	22	25	30	35	22	25	30	35
330	331													Dimension => Ripple Current =>	25 x 25 0.98			
390	391													22 x 30 1.1	25 x 25			
470	471													22 x 30 1.21	25 x 25			
560	561													22 x 35 1.4	25 x 30	30 x 25		
680	681													22 x 40 1.62	25 x 35	30 x 25		
820	821													22 x 45 1.86	25 x 40	30 x 30	30 x 25	
1000	102	22 x 25 1.09				22 x 30 1.17	25 x 25 1.17			22 x 30 1.36	25 x 25				25 x 45	30 x 35	30 x 25	
1200	122															30 x 35	35 x 30	
1500	152	22 x 30 1.44	25 x 25			22 x 35 1.54	25 x 30 1.54	30 x 25		22 x 40 1.82	25 x 35	30 x 25				30 x 35	35 x 35	
1800	182															30 x 45	35 x 40	
2200	222	22 x 35 1.7	25 x 30	30 x 25			25 x 35 1.94	30 x 30	35 x 25 1.94		25 x 45	30 x 35	35 x 30					
3300	332	22 x 45 2.19	25 x 40	30 x 30	35 x 25			30 x 40	35 x 30 2.18			30 x 45	35 x 35					
4700	472			30 x 35	35 x 30				35 x 40 3.08				35 x 45					
6800	682			30 x 45	35 x 40													
8200	822				35 x 45													

DIMENSIONS & PERMISSABLE RIPPLE CURRENT

Dimension: DxL (mm); Ripple Current: A/RMS at 120Hz, 105°C

VDC		200V (2D)				250V (2E)				350V (2V)				400V (2G)			
μF	Code	ΦD = 22	25	30	35	22	25	30	35	22	25	30	35	22	25	30	35
68	680													Dimension => 22 x 25 Ripple Current => 0.52			
82	820									22 x 25 0.47				22 x 30 0.6	25 x 25 0.6		
100	101									22 x 30 0.56	25 x 25 0.55			22 x 30 0.67	25 x 25 0.66		
120	121									22 x 35 0.72	25 x 25 0.6			22 x 35 0.78	25 x 30 0.77	30 x 25 0.78	
150	151									22 x 40 0.83	25 x 30 0.72	30 x 25 0.72		22 x 40 0.91	25 x 35 0.91	30 x 30 0.92	
180	181									25 x 35 0.83	30 x 30 0.84			22 x 45 1.04	25 x 40 1.04	30 x 30 1.01	35 x 25 1.01
220	221	22 x 25 0.92				22 x 30 1.0	25 x 25 0.98			25 x 40 0.96	30 x 35 1.09	35 x 25 0.93		25 x 45 1.21	30 x 35 1.18	35 x 30 1.18	
270	271	22 x 25 1.03				22 x 35 1.16	25 x 25 1.08			25 x 45 1.12	30 x 40 1.26	35 x 30 1.09		25 x 50 1.4	30 x 40 1.37	35 x 30 1.31	
330	331	22 x 30 1.21	25 x 25 1.20			22 x 35 1.28	25 x 30 1.27	30 x 25 1.28				30 x 45 1.43	35 x 30 1.2			30 x 45 1.57	35 x 35 1.52
390	391	22 x 35 1.39	25 x 25 1.31			22 x 40 1.48	25 x 35 1.46	30 x 25 1.39					35 x 35 1.38				35 x 40 1.73
470	471	22 x 40 1.62	25 x 30 1.52	30 x 25 1.54			25 x 40 1.69	30 x 30 1.63	35 x 25 1.62				35 x 40 1.58				35 x 45 1.97
560	561	22 x 45 1.85	25 x 35 1.75	30 x 30 1.78			25 x 45 1.93	30 x 35 1.87	35 x 25 1.78				35 x 45 1.79				
680	681	22 x 45 2.04	25 x 40 2.04	30 x 30 1.96	35 x 25 1.96			30 x 35 2.06	35 x 30 2.06								
820	821		25 x 45 2.34	30 x 35 2.27	35 x 30 2.27			30 x 45 2.48	35 x 35 2.41								
1000	102			30 x 40 2.63	35 x 30 2.51				35 x 40 2.76								
1200	122			30 x 45 3.00	35 x 35 3.42				35 x 45 3.14								
1500	152			30 x 50 3.36	35 x 35 3.42				35 x 45 3.14								
1800	182			30 x 60 3.64	35 x 45 3.51				35 x 60 3.97								

VDC		420V (2P)				450V (2W)			
μF	Code	ΦD = 22	25	30	35	22	25	30	35
47	470	22 x 25 0.38				Dimension => 22 x 25 Ripple Current => 0.42			
68	680	22 x 25 0.48				22 x 30 0.55	25 x 25 0.54		
82	820	22 x 25 0.53	25 x 25 0.54			22 x 35 0.64	25 x 30 0.64		
100	101	22 x 30 0.63	25 x 25 0.63			22 x 40 0.74	25 x 35 0.74	30 x 25 0.71	
120	121	22 x 35 0.74	25 x 30 0.78	30 x 25 0.70		22 x 45 0.85	25 x 35 0.80	30 x 30 0.82	35 x 25 0.82
150	151	22 x 40 0.87		30 x 25 0.80		22 x 45 0.92	25 x 35 0.89	30 x 30 0.93	35 x 25 0.95
180	181	22 x 45 0.93	25 x 35 0.90	30 x 30 0.98		22 x 50 1.06	25 x 40 1.03	30 x 30 1.01	35 x 35 1.04
220	221		25 x 45 1.01	30 x 35 1.05	35 x 25 0.97			30 x 35 1.08	35 x 30 1.22
270	271		25 x 50 1.17	30 x 40 1.22	35 x 30 1.15			30 x 40 1.17	35 x 35 1.43
330	331			30 x 45 1.37	35 x 35 1.35				35 x 35 1.64
390	391			30 x 50 1.56	35 x 40 1.55				35 x 40 1.54
470	471			30 x 60 1.76	35 x 45 1.7				35 x 50 1.85
560	561				35 x 50 1.44				35 x 50 2.02