

Aluminum Electrolytic Capacitor

LM series

- 85°C 2000hours, LUG terminal type.
- High ripple current resistance.
- Suitable for power supply, control circuit of inverter.
- RoHS Compliance
- 85°C 2000小時 插片式電容。
- 耐高紋波電流。
- 適用於電源供應器、變頻器控制電路。

SPECIFICATIONS

Items 項目	Characteristics 特性					
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20°C)					
Operating Temperature Range 適用溫度範圍	-40 ~ +85°C		-25 ~ +85°C			
Rated Voltage Range 額定電壓範圍	16 ~ 250VDC		315 ~ 450VDC			
Leakage Current 洩漏電流	$I \leq 3\sqrt{CV}$ (μA) or 5mA, which is greater. (After 5 minutes application of DC rated voltage, at 20 °C)					
Dissipation Factor 散逸因素($\tan \delta$)	Measurement Frequency: 120Hz. Temperature: 20°C					
	Rated Voltage(V)	16	25	35~50	63~315	350~450
	$\tan \delta$ (Max)	0.35	0.30	0.25	0.20	0.25
When nominal capacitance over 1000 μF , $\tan\delta$ shall be added 0.01 to the listed value with increase of every 1000 μF .						
Low Temperature Stability 低溫特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.					
	Rated Voltage(V)	16~100		160~250		315~450
	Z(-25°C)/Z(20°C)	6		4		8
	Z(-40°C)/Z(20°C)	12		-		-
Load Life 負荷壽命	2000hours,with application of rated voltage at 85°C					
	Capacitance Change	Within ± 20% of Initial Value				
	$\tan \delta$	200% or less of Initial Specified Value				
	Leakage Current	Initial Specified Value or less				
Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 85°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.					
	Capacitance Change	Within ± 20% of Initial Value				
	$\tan \delta$	200% or less of Initial Specified Value				
	Leakage Current	Initial Specified Value or less				
Standards 參照標準	JIS C 5101-4 (IEC 60384)					

Frequency Coefficient of Permissible Ripple Current

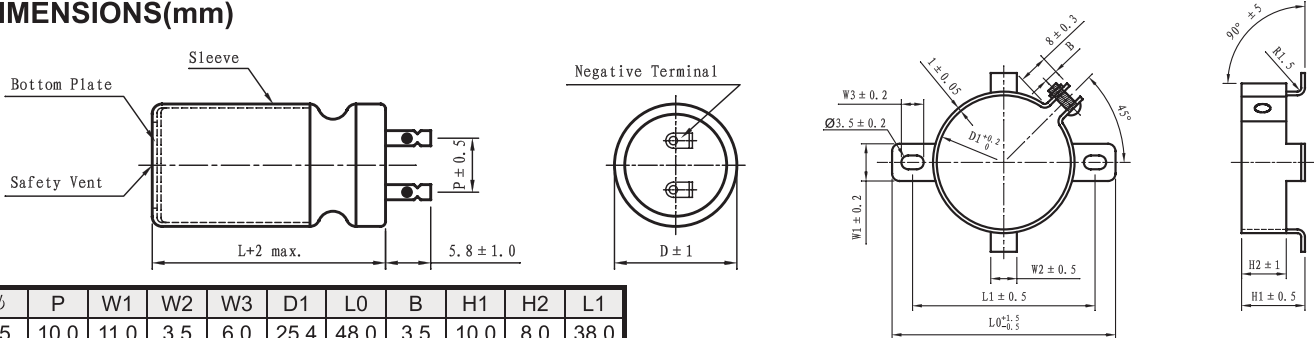
Rated Voltage (V)	Frequency (Hz)			
	50	120	1K	≥10K
16 ~ 100	0.90	1.00	1.20	1.25
160 ~ 315	0.95	1.00	1.20	1.25
350 ~ 450	0.98	1.00	1.15	1.20

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.

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DIMENSIONS(mm)



ϕ	P	W1	W2	W3	D1	L0	B	H1	H2	L1
25	10.0	11.0	3.5	6.0	25.4	48.0	3.5	10.0	8.0	38.0
30	10.0	11.0	3.5	6.0	30.0	52.0	4.0	11.0	9.0	42.0
35	14.0	11.0	3.5	6.0	34.9	58.0	3.5	15.0	10.0	48.0
40	18.0	14.0	3.5	7.0	40.0	65.0	3.0	18.5	12.5	53.5
51	20.0	14.0	4.0	7.0	51.0	72.0	5.5	18.5	15.0	61.0

STANDARD RATINGS

D×L(mm) ; R.C.(A rms) at 85°C 120Hz

Cap (μ F)	V (Code)	16 (1C)		25 (1E)		35 (1V)		40 (1G)		50 (1H)	
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
3300								25x30	2.45	25x30	2.47
4700						25x30	2.88	25x40	3.21	25x40	3.22
6800				25x30	3.12	25x40	3.73	25x50	4.07	25x50	4.09
10000		25x30	3.43	25x40	4.03	25x50	4.71	25x60	5.07	30x50	5.10
15000		25x40	4.42	25x50	5.08	30x50	5.81	30x60	6.24	35x60	6.67
22000		25x50	5.44	30x50	6.15	35x60	7.45	35x60	7.48	35x80	8.34
33000		30x50	6.57	35x60	7.85	35x80	9.17	35x80	9.25	40x100	10.60
47000		35x60	8.19	35x80	9.48	40x100	11.30	51x105	12.50	51x105	12.80
68000		35x80	9.85	40x100	11.60	51x105	13.20				
100000		40x100	12.10	51x105	13.50						
150000		51x105	13.90								

Cap (μ F)	V (Code)	63 (1J)		80 (1K)		100 (2A)		160 (2C)		200 (2D)	
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
330								25x30	0.92	25x30	0.95
470								25x40	1.22	25x40	1.25
680								25x50	1.60	25x50	1.63
1000						25x30	1.61	25x60	2.08	30x50	2.12
1500				25x30	1.91	25x40	2.13	30x60	2.68	35x50	2.87
2200		25x30	2.06	25x40	2.52	25x50	2.75	35x60	3.40	35x60	3.81
3300		25x40	2.73	25x50	3.29	30x50	3.53	35x100	5.02	35x80	5.27
4700		25x50	3.50	25x60	4.14	35x60	4.76	40x100	6.15	40x100	6.81
6800		25x60	4.37	30x60	5.15	35x80	6.17	51x105	7.86	51x105	8.12
10000		30x60	5.46	35x80	7.08	40x100	8.16				
15000		35x80	7.48	40x80	8.42	51x105	10.20				
22000		35x100	9.16	51x105	11.20						
33000		51x105	11.70								

Cap (μ F)	V (Code)	250 (2E)		315 (2F)		350 (2V)		400 (2G)		450 (2W)	
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
68								25x30	0.50	25x30	0.38
100						25x30	0.50	25x40	0.50	25x40	0.50
150				25x30	0.61	25x40	0.69	25x40	0.62	25x50	0.68
220		25x30	0.75	25x40	0.84	25x50	0.91	25x50	0.81	30x50	0.88
330		25x40	1.02	25x50	1.12	25x60	1.21	30x60	1.15	35x60	1.24
470		25x50	1.34	25x60	1.43	30x60	1.54	35x60	1.47	35x80	1.65
680		30x50	1.73	30x60	1.85	35x60	1.98	35x80	1.98	35x100	2.18
1000		30x60	2.25	35x70	2.56	35x100	2.95	40x100	2.78	51x80	2.77
1500		35x80	3.21	35x100	3.54	40x100	3.72	51x105	3.69		
2200		35x100	4.19	40x100	4.41	51x105	4.86				
3300		51x80	5.24	51x105	5.82						