

MD series

- Miniature, Low impedance, 105°C product.
- Applicable to small electronic devices.
- Height : 7 mm.
- RoHS Compliance
- 105°C 低阻抗、小型化產品。
- 適用於小型電子設備。
- 高度：7mm系列。



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 ~ +105°C					
Rated Voltage Range 額定電壓範圍	6.3 ~ 35VDC					
Leakage Current 洩漏電流	$I \leq 0.01CV$ or 3 (µA) which is greater.(After 2 minutes application of DC rated voltage, at 20 °C)					
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C					
	Rated Voltage(V)	6.3	10	16	25	35
	tan δ(Max)	0.18	0.16	0.14	0.12	0.12
Low Temperature Stability 低溫特性	Measurement Frequency: 120Hz.					
	Rated Voltage(V)	6.3	10	16	25	35
	Impedance Ratio(Max) 阻抗比率(最大值)	$Z(-25°C)/Z(20°C)$				
		2	2	2	2	2
Load Life 負荷壽命	1000hours,with application of rated voltage at 105°C					
	Capacitance Change	Within ± 20% of Initial Value				
	tan δ	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 105°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 δ	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)					

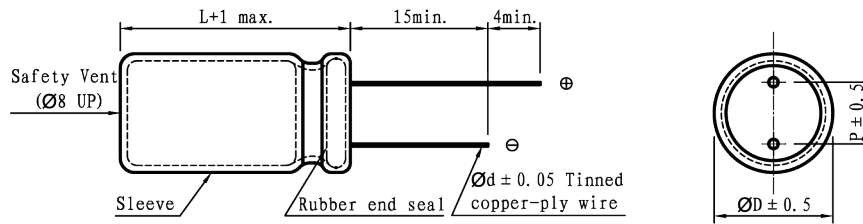
Frequency Coefficient of Permissible Ripple Current

Frequency (Hz)	50	120	300	1K	10K ~ 100K
Coefficient	0.35	0.50	0.64	0.83	1.00

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)



ϕD	4	5	6.3	8
P	1.5	2.0	2.5	3.5
ϕd	0.45	0.5	0.5	0.5

STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 105°C 100KHz, IMP (Ω max) at 20°C 100KHz.

Cap (μF)	V Item	6.3			10			16		
		D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
15								4x7	70	3.3
22					4x7	70	3.3	5x7	110	1.7
33		5x7	110	1.7	5x7	115	1.7	6.3x7	160	0.8
47		5x7	110	1.7	5x7	143	1.3	6.3x7	165	0.8
68		6.3x7	160	0.8	6.3x7	165	0.8	8x7	200	0.5
100		6.3x7	160	0.8	8x7	200	0.5	8x7	210	0.5
150		8x7	200	0.5	8x7	205	0.5			
220		8x7	200	0.5						

Cap (μF)	V Item	25			35		
		D x L	R.C.	IMP	D x L	R.C.	IMP
6.8					4x7	70	3.3
10		4x7	70	3.3	5x7	110	1.7
15		5x7	110	1.7	6.3x7	132	1.7
22		5x7	110	1.7	6.3x7	160	0.8
33		6.3x7	160	0.8	8x7	200	0.5
47		8x7	200	0.5	8x7	230	0.5
68		8x7	200	0.5			
100		8x7	300	0.4			

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