

# M5 series

- Subminiature product, Low impedance, 105°C.
- Applicable to small electronic devices.
- Height : 5mm.
- RoHS Compliance
- 105°C低阻抗、超小型產品。
- 適用於小型電子設備。
- 高度：5mm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)	0.22	0.20	0.18	0.14	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
	Z(-40°C)/Z(20°C)	4	4	3	3	3	
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)						

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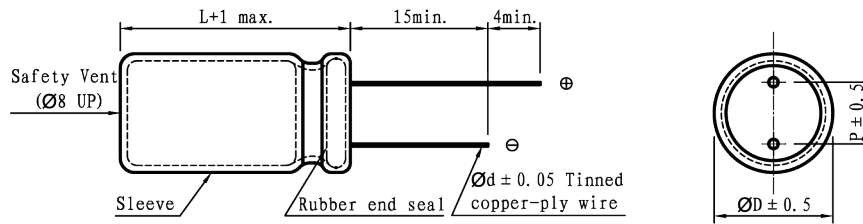
## Frequency Coefficient of Permissible Ripple Current

Frequency (Hz)	50	120	300	1K	10K ~ 100K
Coefficient	0.50	0.65	0.70	0.90	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)



$\phi D$	4	5	6.3
P	1.5	2.0	2.5
$\phi d$	0.45	0.45	0.45

## STANDARD RATINGS

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

Cap ( $\mu F$ )	V Item	6.3			10			16		
		D x L	R.C.	IMP	D x L	R.C.	IMP	D x L	R.C.	IMP
10								4x5	55	5.0
15								5x5	80	2.6
22		4x5	52	5.0	5x5	80	2.6	5x5	82	2.5
33		5x5	82	2.5	5x5	82	2.5	6.3x5	113	1.3
47		5x5	85	2.5	6.3x5	115	1.2	6.3x5	115	1.2
68		6.3x5	118	1.3						
100		6.3x5	120	1.2						

Cap ( $\mu F$ )	V Item	25			35		
		D x L	R.C.	IMP	D x L	R.C.	IMP
1					4x5	48	5.0
1.5					4x5	49	4.9
2.2					4x5	50	4.9
3.3					4x5	52	4.8
4.7		4x5	49	5.0	4x5	55	4.8
6.8		4x5	52	4.8	5x5	80	2.6
10		5x5	82	2.5	5x5	85	2.5
15		6.3x5	116	1.3	6.3x5	116	1.3
22		6.3x5	118	1.2	6.3x5	118	1.2
33		6.3x5	120	1.1			

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