

TZ series

- Snap-in type, 105°C10000 hours long life product.
- Long life, and high ripple current resistance.
- Suitable for computer equipment, inverter air conditioner etc.
- RoHS Compliance
- 基板自立 105°C10000小時長壽命品
- 耐高溫、高紋波。
- 適用於電腦設備、變頻空調等。



SPECIFICATIONS

Items 項目	Characteristics 特性																													
Capacitance Tolerance 靜電容量誤差	$\pm 20\%$ (M)																													
Operating Temperature Range 適用溫度範圍	-25 ~ +105°C																													
Rated Voltage Range 額定電壓範圍	200 ~ 450VDC																													
Leakage Current 洩漏電流	$I \leq 3\sqrt{CV}$ (μA) or 5mA, which is smaller. (After 5 minutes application of DC rated voltage, at 20 °C)																													
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency: 120Hz. Temperature: 20°C <table border="1"> <tr> <th>Rated Voltage(V)</th> <th>160</th> <th>200~400</th> <th>420</th> <th>450</th> <th>500</th> </tr> <tr> <th>tan δ(Max)</th> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> <td>0.20</td> </tr> </table>						Rated Voltage(V)	160	200~400	420	450	500	tan δ(Max)	0.15	0.15	0.15	0.20	0.20												
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Temperature Stability 溫度特性	Measurement Frequency: 120Hz. <table border="1"> <tr> <th>Rated Voltage(V)</th> <td colspan="2">200~400V</td> <td colspan="3">450V</td> </tr> <tr> <th>Z(-25°C)/Z(20°C)</th> <td colspan="2">4</td> <td colspan="3" rowspan="10">8</td> </tr> </table>						Rated Voltage(V)	200~400V		450V			Z(-25°C)/Z(20°C)	4		8														
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Load Life 負荷壽命	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 10,000 hours at 105°C. <table border="1"> <tr> <td>Capacitance Change</td> <td colspan="5">Within $\pm 20\%$ of the Initial Value</td> </tr> <tr> <td>tan δ</td> <td colspan="5">250% or less of Initial Specified Value</td> </tr> <tr> <td>Leakage Current</td> <td colspan="5">Initial Specified Value or less</td> </tr> </table>						Capacitance Change	Within $\pm 20\%$ of the Initial Value					tan δ	250% or less of Initial Specified Value					Leakage Current	Initial Specified Value or less										
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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. <table border="1"> <tr> <td>Capacitance Change</td> <td colspan="5">Within $\pm 15\%$ of the Initial Value</td> </tr> <tr> <td>tan δ</td> <td colspan="5">150% or less of Initial Specified Value</td> </tr> <tr> <td>Leakage Current</td> <td colspan="5">Initial Specified Value or less</td> </tr> </table>						Capacitance Change	Within $\pm 15\%$ of the Initial Value					tan δ	150% or less of Initial Specified Value					Leakage Current	Initial Specified Value or less										
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Standards 參照標準	JIS C 5101-4-1 (IEC 60384)																													

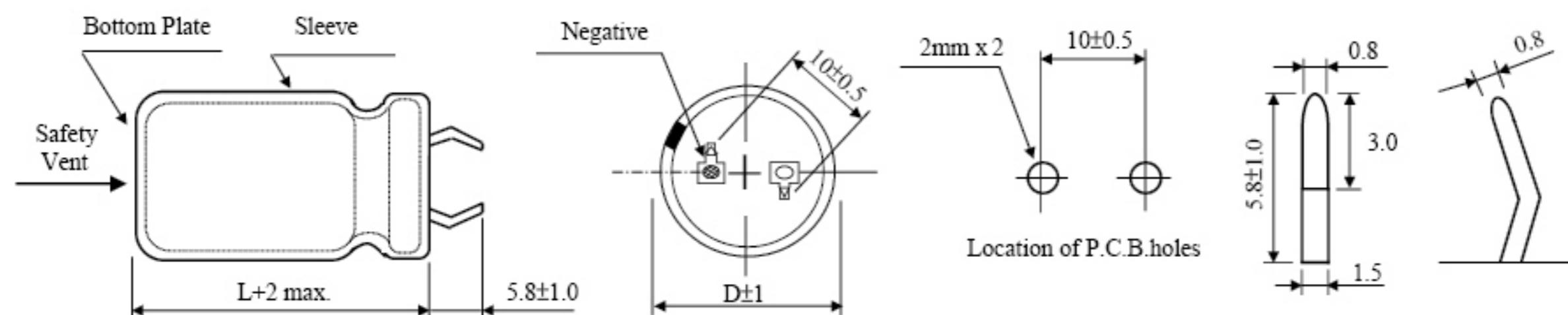
Frequency Coefficient of Permissible Ripple Current

Rated Voltage (V)	Frequency (Hz)					
	50	120	300	1K	10K	50K
200~250	0.81	1.00	1.17	1.32	1.45	1.50
400~450	0.77	1.00	1.16	1.30	1.41	1.43

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)



STANDARD RATINGS

D×L(mm) ; R.C.(A rms) at 105°C 120Hz

Cap (μ F)	V (Code)	200		250		400		450	
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
220							30x35	1.01	30x40
									35x30
270							30x40	1.20	30x45
							35x30	1.15	35x35
330							30x45	1.30	30x50
							35x35	1.28	35x40
							40x30	1.28	1.32
390				30x30	1.31		30x50	1.45	35x45
							35x40	1.45	1.50
470				30x35	1.42		35x45	1.61	35x50
							40x35	1.60	1.65
560	30x30	1.51		35x30	1.60		35x50	1.80	40x60
							40x40	1.80	2.00
680	30x35	1.65		30x45	1.78		40x50	2.05	
				35x35	1.78				
820	30x40			30x50	2.05				
	35x30	2.02		35x40	2.02		40x60	2.35	
				40x30	1.98				
1000	30x45			35x45	2.20				
	35x35	2.21		40x35	2.30				
	40x30	2.15							
1200	35x40	2.38		35x50	2.58				
	40x35	2.45		40x40	2.55				
1500	35x50	2.85		40x50	2.98				
	40x40	2.80							
1800	40x50	3.25		40x60	3.40				