

TKP 105°C 1000H.Non-Polarized SMD Electrolytic Capacitor

Non-polarized with wide temperature range -55°C~+105°C

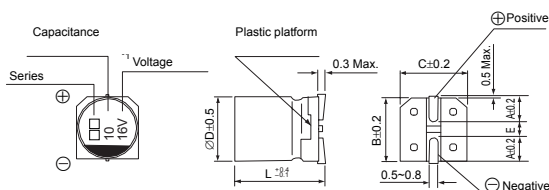
Load life of 1000 hours

RoHS & REACH compliant, Halogen-free

SPECIFICATIONS

Items	Characteristics					
Operation Temperature Range	-55 ~ +105°C					
Voltage Range	6.3 ~ 50V					
Capacitance Range	0.1 ~ 47μF					
Capacitance Tolerance	±20% at 120Hz, 20°C					
Leakage Current	Leakage current ≤0.05CV or 10μA, whichever is greater (after 2 minutes application of rated voltage at 20°C) C: Nominal capacitance (μF) , V: Rated voltage (V)					
Dissipation Factor (tan δ)	Measurement frequency : 120Hz, Temperature : 20°C					
	Rated Voltage (V)	6.3	10	16, 25	35, 50	
Stability at Low Temperature	Measurement frequency : 120Hz					
	Rated Voltage (V)	6.3	10	16, 25	35, 50	
Load Life	Impedance Ratio	Z(-25°C) / Z(20°C)	4	3	2	2
	ZT/Z20 (max.)	Z(-55°C) / Z(20°C)	8	6	4	3
Shelf Life	After 1000 hours application of the rated voltage at 105°C (the polarity needs to exchange every 250 hours), they meet the characteristics listed below.					
	Capacitance Change	Within ±20% of initial value				
Resistance to Soldering Heat	Dissipation Factor	200% or less of initial specified value				
	Leakage Current	initial specified value or less				
Marking	After reflow soldering and restored at room temperature, they meet the characteristics listed below.					
	Capacitance Change	Within ±10% of initial value				
Marking	Dissipation Factor	initial specified value or less				
	Leakage Current	initial specified value or less				
Marking	Black print on the case top.					

DRAWING (Unit: mm)



*1. Voltage mark for 6.3V is [6V]

DIMENSIONS (Unit: mm)

∅D x L	4 x 5.4	5 x 5.4	6.3 x 5.4
A	2.0	2.2	2.6
B	4.3	5.3	6.6
C	4.3	5.3	6.6
E ± 0.2	1.0	1.4	1.9
L	5.4	5.4	5.4

DIMENSIONS & MAXIMUM PERMISSIBLE RIPPLE CURRENT

μF	WV Code	6.3		10		16		25		35		50	
		Case size	Ripple current	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current	Case size	Ripple current
0.1	104											4 × 5.4	1.0
0.22	224											4 × 5.4	2.0
0.33	334											4 × 5.4	2.8
0.47	474											4 × 5.4	4.0
1	105											4 × 5.4	8.4
2.2	225									4 × 5.4	8.4	5 × 5.4	13
3.3	335							5 × 5.4	12	5 × 5.4	16	5 × 5.4	17
4.7	475					4 × 5.4	12	5 × 5.4	16	5 × 5.4	18	6.3 × 5.4	20
10	106			4 × 5.4	17	5 × 5.4	23	6.3 × 5.4	27	6.3 × 5.4	29		
22	226	5 × 5.4	28	6.3 × 5.4	33	6.3 × 5.4	37						
33	336	6.3 × 5.4	37	6.3 × 5.4	41	6.3 × 5.4	49						
47	476	6.3 × 5.4	45										

•Case size $\varnothing\text{D}\times\text{L}$ (mm), ripple current (mA rms) at 105°C, 120Hz**FREQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT**

Frequency	50Hz	120Hz	300Hz	1KHz	10KHz~
Coefficient	0.70	1.00	1.17	1.36	1.50

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5~10°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

◆ How to order

<u>TKP</u>	<u>A</u>	<u>106</u>	<u>M</u>	<u>0035</u>	<u>0505</u>	<u>R</u>	<u>000</u>
<u>Type</u>	<u>Material Code</u>	<u>Capacitance Code</u>	<u>Tolerance</u>	<u>Rated Voltage</u>	<u>Size Code</u>	<u>Package Code</u>	<u>Suffix Indicate Special Requirement</u>
TKP	A: Aluminum Cap For TCS, TCK TFZ TKZ....etc.	pF Code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) 106 = 10uF	M: +/-20%	Code 0035: 35VDC <u>For DC Voltage</u> 0006: 6.3VDC 0035: 35VDC 0050: 50VDC	Code 0505: Size 5x5.4mm <u>Size for V-chip E-cap</u> 0405: Size 4x5.4mm 0605: Size 6.3x5.4mm	R: Tape & Reel	000: Indicating Standard

Note: Specification is subject to change without further notice. For more details and updates, please visit our website.