

Surface Mount Type

POSCAP

Series : TPC



Features

- Low profile (Height 1.1 mm)
- RoHS compliance, Halogen free

Specifications

Size code	B1	D2
Category temperature range	-55 °C to +105 °C	
Rated voltage range	6.3 V.DC to 12.5 V.DC	6.3 V.DC to 10 V.DC
Category voltage range	5.0 V.DC to 10.0 V.DC	6.3 V.DC to 10 V.DC
Rated capacitance range	10 µF to 47 µF	68 µF to 330 µF
Capacitance tolerance	±20 % (120 Hz / + 20 °C)	
Leakage current	Please see the attached characteristics list	
Dissipation factor (tan δ)	Please see the attached characteristics list	
Surge voltage (V.DC)	Rated voltage × 1.15	
Endurance	+105 °C 2000h, (B1 size : 1000h) rated voltage applied * Rated temp. +85 °C 1000h rated voltage applied	
	Capacitance change	Within ±20 % of the initial value
	tan δ	≤ 1.5 times of the initial limit
	DC leakage current	Within the initial limit
Damp heat (Steady State)	+60 °C, 90 % to 95 %, 500 h, No-applied voltage	
	Capacitance change	Within +40 %, -20 % of the initial value
	tan δ	≤ 1.5 times of the initial limit
	DC leakage current	≤ 3 times of the initial limit

Marking

B1 Size

D2 Size

R. Voltage (V.DC)	6.3	8.0	10.0	12.5
Code	j	k	A	B

B1 Size					
R. Cap. (µF)	10	15	22	33	47
Code	A7	E7	J7	N7	S7

Dimensions (not to scale)

Unit : mm

Size code	L±0.2	W±0.2	H±0.1	S±0.2	W1±0.1
B1	3.5	2.8	1.1	0.8	2.2
D2	7.3	4.3	1.9	1.3	2.4

* Externals of figure are the reference.

Characteristics list

Series	Rated voltage (V.DC)	Rated temp. (°C)	Category voltage (V.DC)	Category temp. (°C)	Rated capacitance (µF)	Case size (mm)			Size code	Specifications				Standard		Floor life	
						L	W	H		Ripple*1 (mA r.m.s.)	ESR*2 (mΩ max.)	tan δ*3	LC*4 (µA)	Part number	Min. Packaging Qty (pcs)	Reflow Temp ≤260°C	Reflow Temp ≤250°C
TPC	6.3	85	5.0	105	47	3.5	2.8	1.1	B1	1100	55	0.10	29.6	6TPC47M	3000	3	3
						3.5	2.8	1.1		1000	70	0.10	29.6	6TPC47MB			
		105	6.3	105	100	7.3	4.3	1.9	D2	1700	45	0.10	63.0	6TPC100M	3000		
						7.3	4.3	1.9		1900	40	0.10	94.5	6TPC150M			
						7.3	4.3	1.9		1900	40	0.10	207.9	6TPC330MA			
	8.0	85	6.3	105	22	3.5	2.8	1.1	B1	1000	70	0.10	17.6	8TPC22M	3000	3	3
						7.3	4.3	1.9		D2	1900	40	0.10	120.0			
		105	8.0	105	150	7.3	4.3	1.9	D2	1700	45	0.10	68.0	10TPC68M	3000		
						7.3	4.3	1.9		1700	45	0.10	100.0	10TPC100M			
						7.3	4.3	1.9		1700	45	0.10	100.0	10TPC100M			
12.5	85	10.0	105	10	3.5	2.8	1.1	B1	800	80	0.10	12.5	12TPC10M	3000	3		
					3.5	2.8	1.1		B1	800	80	0.10	18.8			12TPC15M	

*1 Ripple current (100 kHz/ +45 °C), *2 ESR (100 kHz/+20 °C) *3 tan δ (120 Hz/+20 °C) *4 After 5 minutes

◆ Please refer to each page in this catalog for "Reflow conditions" and "Taping specifications".