

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
Damp heat (Steady State)	DC leakage current	Within the initial limit
	+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

Diagram of B1 size component layout. It shows a rectangular component with a polarity marking (+) on the left. The R.Cap. code is indicated by a dashed box on the right. The R. Voltage code is indicated by a solid box on the left. The Lot. No. is indicated by a solid box on the right.

D2 Size

Diagram of D2 size component layout. It shows a rectangular component with a polarity marking (+) on the left. The R.Cap. code is indicated by a dashed box on the right. The R. Voltage code is indicated by a solid box on the left. The Lot. No. is indicated by a solid box on the right.

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

B1 Size

R. Cap. (μ F)	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	
						L	W	H		Ripple*1 current (mA r.m.s.)	ESR*2 (mΩ max.)	tan δ*3	LC*4 (µA)	Part number	Min. Packaging Qty (pcs)
TPC	6.3	85	5.0	105	47	3.5	2.8	1.1	B1	1100	55	0.10	29.6	6TPC47M	3000
		85	5.0	105		3.5	2.8	1.1	B1	1000	70	0.10	29.6	6TPC47MB	3000
		105	6.3	105	100	7.3	4.3	1.9	D2	1700	45	0.10	63.0	6TPC100M	3000
		105	6.3	105	150	7.3	4.3	1.9	D2	1900	40	0.10	94.5	6TPC150M	3000
		85	5.0	105	330	7.3	4.3	1.9	D2	1900	40	0.10	207.9	6TPC330MA	3000
	8.0	85	6.3	105	22	3.5	2.8	1.1	B1	1000	70	0.10	17.6	8TPC22M	3000
		105	8.0	105	150	7.3	4.3	1.9	D2	1900	40	0.10	120.0	8TPC150M	3000
		105	10.0	105	68	7.3	4.3	1.9	D2	1700	45	0.10	68.0	10TPC68M	3000
	10	105	10.0	105	100	7.3	4.3	1.9	D2	1700	45	0.10	100.0	10TPC100M	3000
		85	10.0	105	10	3.5	2.8	1.1	B1	800	80	0.10	12.5	12TPC10M	3000
	12.5	85	10.0	105	15	3.5	2.8	1.1	B1	800	80	0.10	18.8	12TPC15M	3000

*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".