

Surface Mount Type

POSCAP

Series : **TPB**



Features

- Standard
- RoHS compliance, Halogen free

Specifications

Size code	B2	D3L	D4
Category temperature range	-55 °C to +105 °C		
Rated voltage range	4 V.DC to 10 V.DC		6.3 V.DC to 10 V.DC
Category voltage range	4 V.DC to 10 V.DC		6.3 V.DC to 10 V.DC
Rated capacitance range	33 μF to 68 μF	150 μF to 330 μF	220 μF to 470 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, (B2 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

B2 Size

Polarity marking(+) R.Cap. code

R. Voltage code Lot. No.

D4 Size

Polarity marking(+) R.Cap. code

R. Voltage code Lot. No.

D3L Size

Polarity marking(+) R.Cap. code

R. Voltage code Lot. No.

R. Voltage (V.DC)	4.0	6.3	10.0
Code	g	j	A

B2 Size

R. Cap. (μ F)	33	47	68
Code	N7	S7	W7

Dimensions (not to scale)

	Unit : mm				
Size code	L±0.3*1	W±0.2	H±0.2*2	S±0.2	W1±0.1
B2	3.5	2.8	1.9	0.8	2.2
D3L	7.3	4.3	2.8	1.3	2.4
D4	7.3	4.3	3.8	1.3	2.4

* External of figure are the reference.
 * 1 ±0.2 : B2 * 2 ±0.1 : B2

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 current (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
TPB	4.0	105	4.0	105	68	3.5	2.8	1.9	B2	1100	70	0.08	27.2	4TPB68M	2000	3	3
		105	4.0	105	330	7.3	4.3	2.8	D3L	2000	40	0.10	132.0	4TPB330ML	2500		2a
	6.3	105	6.3	105	33	3.5	2.8	1.9	B2	1100	70	0.08	20.7	6TPB33M	2000		3
			6.3	105	68	3.5	2.8	1.9	B2	1100	70	0.08	42.8	6TPB68M	2000		3
		105	6.3	105	220	7.3	4.3	2.8	D3L	2000	40	0.10	138.6	6TPB220ML	2500		2a
		85	5.0	105		7.3	4.3	2.8	D3L	2000	40	0.10	207.9	6TPB330MAL	2500		2a
		105	6.3	105	330	7.3	4.3	2.8	D3L	2000	40	0.10	207.9	6TPB330ML	2500		2a
		105	6.3	105		7.3	4.3	3.8	D4	3000	40	0.10	207.9	6TPB330M	2000		2a
		105	6.3	105	470	7.3	4.3	3.8	D4	3000	35	0.15	296.1	6TPB470M	2000		2a
	10	105	10.0	105	33	3.5	2.8	1.9	B2	1100	70	0.08	33.0	10TPB33M	2000		3
		105	10.0	105	47	3.5	2.8	1.9	B2	1100	70	0.08	47.0	10TPB47M	2000		3
		105	10.0	105	150	7.3	4.3	2.8	D3L	2000	40	0.10	150.0	10TPB150ML	2500		2a
		105	10.0	105	220	7.3	4.3	2.8	D3L	2000	40	0.10	220.0	10TPB220ML	2500		2a
		105	10.0	105		7.3	4.3	3.8	D4	3000	40	0.10	220.0	10TPB220M	2000		2a
		105	10.0	105	330	7.3	4.3	3.8	D4	3000	35	0.10	330.0	10TPB330M	2000		2a

*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".

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.

Should a safety concern arise regarding this product, please be sure to contact us immediately.