

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	
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

D3L Size

D4 Size

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

R. Cap. (μF)	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

* Externals 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	
									D3L	2000	40	0.10	132.0	4TPB330ML	2500		2a	
	6.3	NEW 105	6.3	105	33	3.5	2.8	1.9	B2	1100	70	0.08	20.7	6TPB33M	2000		3	
									B2	1100	70	0.08	42.8	6TPB68M	2000			
		105	6.3	105	220	7.3	4.3	2.8	2.8	D3L	2000	40	0.10	138.6	6TPB220ML		2500	2a
										D3L	2000	40	0.10	207.9	6TPB330MAL		2500	
										D3L	2000	40	0.10	207.9	6TPB330ML		2500	
										D4	3000	40	0.10	207.9	6TPB330M		2000	
	10	105	6.3	105	470	7.3	4.3	3.8	D4	3000	35	0.15	296.1	6TPB470M	2000		2a	
									B2	1100	70	0.08	33.0	10TPB33M	2000			
										B2	1100	70	0.08	47.0	10TPB47M			2000
									D3L	2000	40	0.10	150.0	10TPB150ML	2500			
										2000	40	0.10	220.0	10TPB220ML	2500			
										3000	40	0.10	220.0	10TPB220M	2000			
3000	35	0.10	330.0	10TPB330M	2000													

*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".