

## 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)

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

Unit : mm

\* 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		
										1900	40	0.10	94.5	6TPC150M			
										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
										1900	40	0.10	120.0	8TPC150M			
		105	8.0	105	150	7.3	4.3	1.9	D2	1700	45	0.10	68.0	10TPC68M	3000		
										1700	45	0.10	100.0	10TPC100M			
										800	80	0.10	12.5	12TPC10M			
12.5	85	10.0	105	15	3.5	2.8	1.1	B1	800	80	0.10	18.8	12TPC15M	3000	3		

\*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".

## Guidelines and precautions regarding the technical information and use of our products described in this online catalog.

- If you want to use our products described in this online catalog for applications requiring special qualities or reliability, or for applications where the failure or malfunction of the products may directly jeopardize human life or potentially cause personal injury (e.g. aircraft and aerospace equipment, traffic and transportation equipment, combustion equipment, medical equipment, accident prevention, anti-crime equipment, and/or safety equipment), it is necessary to verify whether the specifications of our products fit to such applications. Please ensure that you will ask and check with our inquiry desk as to whether the specifications of our products fit to such applications use before you use our products.
- The quality and performance of our products as described in this online catalog only apply to our products when used in isolation. Therefore, please ensure you evaluate and verify our products under the specific circumstances in which our products are assembled in your own products and in which our products will actually be used.
- If you use our products in equipment that requires a high degree of reliability, regardless of the application, it is recommended that you set up protection circuits and redundancy circuits in order to ensure safety of your equipment.
- The products and product specifications described in this online catalog are subject to change for improvement without prior notice. Therefore, please be sure to request and confirm the latest product specifications which explain the specifications of our products in detail, before you finalize the design of your applications, purchase, or use our products.
- The technical information in this online catalog provides examples of our products' typical operations and application circuits. We do not guarantee the non-infringement of third party's intellectual property rights and we do not grant any license, right, or interest in our intellectual property.
- If any of our products, product specifications and/or technical information in this online catalog is to be exported or provided to non-residents, the laws and regulations of the exporting country, especially with regard to security and export control, shall be observed.

## <Regarding the Certificate of Compliance with the EU RoHS Directive/REACH Regulations>

- The switchover date for compliance with the RoHS Directive/REACH Regulations varies depending on the part number or series of our products.
- When you use the inventory of our products for which it is unclear whether those products are compliant with the RoHS Directive/REACH Regulation, please select "Sales Inquiry" in the website inquiry form and contact us.

**We do not take any responsibility for the use of our products outside the scope of the specifications, descriptions, guidelines and precautions described in this online catalog.**

---