



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Surface Mount Type **POSCAP**

Series : TPU



Features

- Small size, Low profile (L2.0 × W 1.25 × H 0.9 mm)
- Face down terminal type
- RoHS compliance, Halogen free

Specifications

| Size code | S09 | B09 |
|----------------------------|---|--|
| Category temperature range | -55 °C to +85 °C | |
| Rated voltage range | 2.5 V.DC to 10 V.DC | 6.3 V.DC |
| Category voltage range | 2.5 V.DC to 10 V.DC | 6.3 V.DC |
| Rated capacitance range | 4.7 μF to 100 μF | 150 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 | +85 °C, 1000 h, 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

| S09 Size | | B09 Size | |
|---------------------|---------------------|---------------------|---------------------|
| Polarity marking(+) | R.Cap. code | Polarity marking(+) | R.Cap. code |
| R. Voltage code | Lot. No. | R. Voltage code | Lot. No. |
| R. Voltage (V.DC) | 2.5 4.0 6.3 10.0 | R. Voltage (V.DC) | 2.5 4.0 6.3 10.0 |
| Code | e g j A | Code | e g j A |
| S09 Size | | | |
| R. Cap. (μF) | 4.7 10 22 47 68 100 | R. Cap. (μF) | 4.7 10 22 47 68 100 |
| Code | s A J S W A | Code | s A J S W A |
| B09 Size | | | |
| R. Cap. (μF) | 150 | R. Cap. (μF) | 150 |
| Code | E8 | Code | E8 |

Dimensions (not to scale)

| Size code | L±0.1*1 | W±0.1*1 | H±0.1 | S±0.1*1 | W1±0.1 |
|-----------|---------|---------|-------|---------|--------|
| S09 | 2.0 | 1.25 | 0.9 | 0.5 | 0.9 |
| B09 | 3.5 | 2.8 | 0.9 | 0.8 | 2.2 |

Unit : mm

* Externals of figure are the reference. *1 ±0.2 : B09

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 (mAr.m.s.) | ESR*2 (mΩ max.) | tan δ*3 | LC*4 (μA) | Part number | Min. Packaging Qty (pcs) | |
| TPU | 2.5 | 85 | 2.5 | 85 | 47 | 2.0 | 1.25 | 0.9 | S09 | 510 | 150 | 0.10 | 23.5 | 2R5TPU47MSI | 3000 | |
| | | 85 | 2.5 | 85 | 100 | 2.0 | 1.25 | 0.9 | | 510 | 150 | 0.10 | 50.0 | ETPU100MSI | 3000 | |
| | 6.3 | 85 | 4.0 | 85 | 68 | 2.0 | 1.25 | 0.9 | | 510 | 150 | 0.10 | 54.4 | 4TPU68MSI | 3000 | |
| | | 85 | 6.3 | 85 | 10 | 2.0 | 1.25 | 0.9 | | 400 | 250 | 0.10 | 6.3 | 6TPU10MSI | 3000 | |
| | | 85 | 6.3 | 85 | 22 | 2.0 | 1.25 | 0.9 | | 510 | 150 | 0.10 | 27.7 | 6TPU22MSI | 3000 | |
| | | 85 | 6.3 | 85 | 47 | 2.0 | 1.25 | 0.9 | | 510 | 150 | 0.10 | 59.2 | 6TPU47MSI | 3000 | |
| | | 85 | 6.3 | 85 | 150 | 3.5 | 2.8 | 0.9 | | B09 | 670 | 100 | 0.10 | 94.5 | 6TPU150MBI | 3000 |
| | | 85 | 10.0 | 85 | 4.7 | 2.0 | 1.25 | 0.9 | | S09 | 360 | 300 | 0.10 | 4.7 | 10TPU4R7MSI | 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".