

Surface Mount Type

POSCAP



Series : **TPSF**

Features

- Super low ESR (6 mΩ max.)
- Super low ESL (0.7 nH)
- Face down terminal type
- RoHS compliance, Halogen free

Specifications

| | | |
|----------------------------|---|--|
| Size code | B2S | |
| Category temperature range | -55 °C to +105 °C | |
| Rated voltage range | 2.0 V.DC to 2.5 V.DC | |
| Category voltage range | 2.0 V.DC to 2.5 V.DC | |
| Rated capacitance range | 270 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, 1000 h 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

Polarity marking(+) R. Voltage code

R. Cap. code Lot. No.

| | | |
|-------------------|-----|-----|
| R. Voltage (V.DC) | 2.0 | 2.5 |
| Code | d | e |

| | |
|--------------|-----|
| R. Cap. (μF) | 270 |
| Code | L8 |

Dimensions (not to scale)

Unit : mm

| Size code | L±0.2 | W±0.2 | H±0.1 | S±0.3 | W1±0.1 |
|-----------|-------|-------|-------|-------|--------|
| B2S | 3.5 | 2.8 | 1.9 | 0.8 | 2.2 |

* 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 current (mAr.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 |
| TPSF | 2 | 105 | 2.0 | 105 | 270 | 3.5 | 2.8 | 1.9 | B2S | 3200 | 6/500 kHz | 0.08 | 108 | 2TPSF270M6E | 2000 | 5 | 5 |
| | | 105 | 2.0 | 105 | | 3.5 | 2.8 | 1.9 | | 2400 | 9/300 kHz | 0.08 | 108 | 2TPSF270M9G | 2000 | | |
| | 2.5 | 105 | 2.5 | 105 | 270 | 3.5 | 2.8 | 1.9 | 3200 | 6/500 kHz | 0.08 | 135 | ETPSF270M6E | 2000 | 3 | 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".

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