

## 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         |
|                            | 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

|                   |     |     |
|-------------------|-----|-----|
|                   |     |     |
| 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    |                          |
|--------|----------------------|------------------|-------------------------|---------------------|------------------------|----------------|-----|-----|-----------|------------------------------|------------------|----------|------------|-------------|--------------------------|
|        |                      |                  |                         |                     |                        | 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) |
| TPSF   | 2                    | 105              | 2.0                     | 105                 | 270                    | 3.5            | 2.8 | 1.9 | B2S       | 3200                         | 6/500 kHz        | 0.08     | 108        | 2TPSF270M6E | 2000                     |
|        |                      | 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                     |

\*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".