

## Surface Mount Type

Series : TQS



## POSCAP



### Features

- High voltage (35 V.DC max.)
- RoHS compliance, Halogen free

### Specifications

|                            |                                                 |                                          |
|----------------------------|-------------------------------------------------|------------------------------------------|
| Size code                  | B1S                                             |                                          |
| Category temperature range | -55 °C to +105 °C                               |                                          |
| Rated voltage range        | 16 V.DC to 35 V.DC                              |                                          |
| Category voltage range     | 16 V.DC to 35 V.DC                              |                                          |
| Rated capacitance range    | 6.8 µF to 33 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) | 16  | 25 | 35 |
| Code              | C   | E  | V  |
| R. Cap. (µF)      | 6.8 | 10 | 33 |
| Code              | W6  | A7 | N7 |

### Dimensions (not to scale)

|                                          |       |       |       |       |        |
|------------------------------------------|-------|-------|-------|-------|--------|
|                                          |       |       |       |       |        |
| Unit : mm                                |       |       |       |       |        |
| Size code                                | L±0.2 | W±0.2 | H±0.1 | S±0.3 | W1±0.1 |
| B1S                                      | 3.5   | 2.8   | 1.1   | 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 current (mA r.m.s.) <sup>*1</sup> | ESR (mΩ max.) <sup>*2</sup> | tan δ <sup>*3</sup> | LC (µA) <sup>*4</sup> | Part number | Min. Packaging Qty (pcs) |
| TQS    | 16                   | 105              | 16.0                    | 105                 | 33                     | 3.5            | 2.8 | 1.1 | B1S       | 1500                                     | 70                          | 0.10                | 52.8                  | 16TQS33MBD  | 2500                     |
|        | 25                   | 105              | 25.0                    | 105                 | 10                     | 3.5            | 2.8 | 1.1 |           | 1000                                     | 100                         | 0.10                | 25.0                  | 25TQS10MED  | 2500                     |
|        | 35                   | 105              | 35.0                    | 105                 | 6.8                    | 3.5            | 2.8 | 1.1 |           | 900                                      | 150                         | 0.10                | 23.8                  | 35TQS6R8MHD | 2500                     |

\*1 Ripple current (100 kHz/ +105 °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".