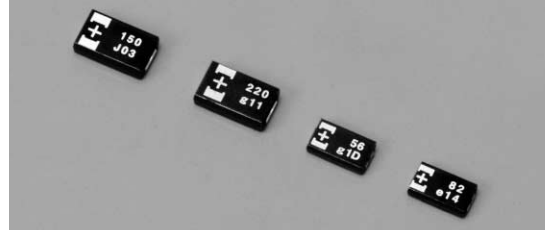


TPC Series

Low Profile Products

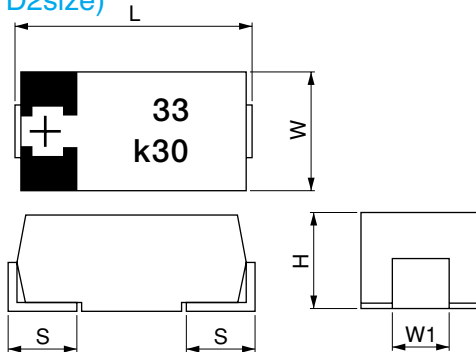
TPC series has low profile and low ESR. TPC series aids in the miniaturization of any products.



Specifications

| Items | Condition | Characteristics | | |
|--|---|--|---------------------------------------|------------|
| Operating Temperature range | — | -55 to +105 (°C) | | |
| Rated capacitance range | 120Hz/20°C | 33 to 330 (μF) | | |
| Capacitance tolerance | 120Hz/20°C | M:±20% | | |
| Rated voltage | — | 2.5 to 10 (V.DC) | | |
| Dissipation Factor (D.F.) | 120Hz/20°C | ≤10.0 (%) | | |
| Leakage current | Rated voltage applied, after 5 minutes | ≤0.1CV (μA) | | |
| Equivalent series resistance ESR (mΩmax.) | 100kHz/20°C | Please see the attached characteristics list | | |
| Temperature characteristics of Impedance ratio | 100kHz/+20°C | -55°C | Z/Z _{20°C} | 1.0 to 2.0 |
| | | +105°C | Z/Z _{20°C} | 0.6 to 1.0 |
| Endurance | 105°C, 2000h, rated voltage applied C1 size: 1000h | ΔC/C | Within±20% of the initial value | |
| | | D.F. | ≤1.5 times the initial limit | |
| | | L.C. | ≤The initial limit | |
| Damp heat (Steady state) | 60°C, 90 to 95%RH, 500h, No voltage applied | ΔC/C | Within+40%, -20% of the initial value | |
| | | D.F. | ≤1.5 times the initial limit | |
| | | L.C. | ≤3 times the initial limit | |
| Surge | 105°C, 1000 cycles, 1kΩ discharge resistance, surge voltage applied | ΔC/C | Within±5% of the initial value | |
| | | D.F. | ≤The initial limit | |
| | | L.C. | ≤3 times the initial limit | |

Dimensions (unit: mm) (C1, D2size)



| Size code | L (±0.2) | W (±0.2) | H (±0.1) | S (±0.2) | W1 (±0.1) |
|-----------|----------|----------|----------|----------|-----------|
| C1 | 6.0 | 3.2 | 1.4 | 1.3 | 1.8 |
| D2 | 7.3 | 4.3 | 1.9 | 1.3 | 2.4 |

Size List

| RV (SV) μF | 2.5 (3.2) | 4.0 (5.0) | 6.3 (8.0) | 8.0 (10.0) | 10.0 (13.0) |
|---------------|--------------|--------------|--------------|---------------|----------------|
| 33 | | | | C1 | |
| 56 | | C1 | | | |
| 68 | | | C1 | | D2 |
| 82 | C1 | | | | |
| 100 | | C1 | D2,C1 | | D2 |
| 150 | | D2 | D2 | D2 | |
| 220 | D2 | D2 | | | |
| 330 | D2 | | | | |

TPC Series

Characteristics List

| Size code | SANYO Part number | Rated Voltage (V) | Rated Capacitance (μF) | D.F. (%max.) | L.C. (μA) max./5min. | E.S.R. (mΩmax) 100kHz/20°C | Maximum allowable ripple current (mA _{rms}) 100kHz ^{*1} | MSL | |
|-----------|-------------------|-------------------|------------------------|--------------|----------------------|----------------------------|--|---------------------|---------------------|
| | | | | | | | | Reflow Temp. ≤260°C | Reflow Temp. ≤250°C |
| C1 | 8TPC33M | 8.0 | 33 | 10.0 | 26.4 | 70 | 1200 | 3 | 3 |
| | 6TPC68M | 6.3 | 68 | 10.0 | 42.8 | 55 | 1300 | | |
| | 6TPC100MC | 6.3 | 100 | 10.0 | 63.0 | 55 | 1300 | | |
| | 4TPC56M | 4.0 | 56 | 10.0 | 22.4 | 70 | 1200 | | |
| | 4TPC100M | 4.0 | 100 | 10.0 | 40.0 | 55 | 1300 | | |
| | 2R5TPC82M | 2.5 | 82 | 10.0 | 20.5 | 70 | 1200 | | |
| D2 | 10TPC68M | 10.0 | 68 | 10.0 | 68.0 | 45 | 1700 | 3 | 2a |
| | 10TPC100M | 10.0 | 100 | 10.0 | 100.0 | 45 | 1700 | | |
| | 8TPC150M | 8.0 | 150 | 10.0 | 120.0 | 40 | 1900 | | |
| | 6TPC100M | 6.3 | 100 | 10.0 | 63.0 | 45 | 1700 | | |
| | 6TPC150M | 6.3 | 150 | 10.0 | 94.5 | 40 | 1900 | | |
| | 4TPC150M | 4.0 | 150 | 10.0 | 60.0 | 45 | 1700 | | |
| | 4TPC220M | 4.0 | 220 | 10.0 | 88.0 | 40 | 1900 | | |
| | 2R5TPC220M | 2.5 | 220 | 10.0 | 55.0 | 45 | 1700 | | |
| | 2R5TPC330M | 2.5 | 330 | 10.0 | 82.5 | 40 | 1900 | | |

*1: 100k to 500kHz, 45°C