

Features

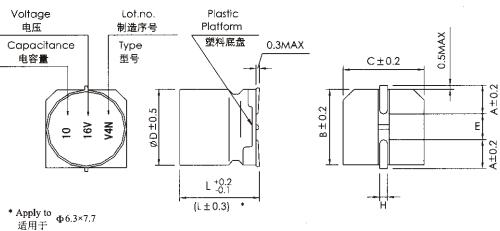
- Low impedance.
- Reflow soldering is available.
- Available for high density surface mounting.
- Operating over wide temperature range (-55°C~+105°C)



Specifications

| Item | Characteristics | | | | | |
|---|--|---|---|------|------|------|
| Operating temperature range | -55~+105°C | | | | | |
| Rated voltage range | 6.3V~35V | | | | | |
| Nominal Capacitance Range | 1-220uF | | | | | |
| Nominal Capacitance Tolerance | $\pm 20\%$ (20°C, 120Hz) | | | | | |
| Leakage Current | 1 ≤ 0.01C _R V _R or 3(uA) Whichever is greater (After 2 minutes' application of rated voltage) C _R : Nominal Capacitance(uF) U _R : Rated voltages (V) | | | | | |
| Dissipation Factor(Max) 20°C, 120Hz | UR(V) | 6.3 | 10 | 16 | 25 | 35 |
| | tg δ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 |
| Load Life | After 1000 hours' application of rated voltage at 105°C, with the polarity inverted every 250 hours, the capacitor shall meet the following requirement. | | | | | |
| | Capacitance Change Within $\pm 20\%$ of the initial value ($\leq 16V$: within ± 25 of the initial value) | | | | | |
| | Dissipation Factor | Not more than 300% of the initial specified value | | | | |
| | Leakage Current | Not more than the initial specified value | | | | |
| Shelf Life | After storage for 1000 hours +105°C, U _R to be applied for 30 minutes, the capacitors shall meet the requirement of load life above | | | | | |
| Low Temperature Stability Impedance Ratio(120Hz) | UR(V) | 6.3 | 10 | 16 | 25 | 50 |
| | Z(-25°C) /Z(+20°C) | 2 | 2 | 2 | 2 | 2 |
| | Z(-40°C) /Z(+20°C) | 4 | 4 | 3 | 3 | 3 |
| Resistance to Soldering Heat | After reflow soldering according to Reflow Soldering Temperature , Profile(see page8)and restored at room temperature, they meet the following requirement. | | | | | |
| | Capacitance Change | | Within $\pm 10\%$ of the initial value | | | |
| | Dissipation Factor | | Not more than the initial specified value | | | |
| | Leakage Current | | Not more than the initial specified value | | | |

Dimensions



| | 4×5.4 | 5×5.4 | 6.3×5.4 | 6.3×7.7 |
|---|-------|---------|---------|---------|
| A | 1.8 | 2.1 | 2.4 | 2.4 |
| B | 4.3 | 5.3 | 6.6 | 6.6 |
| C | 4.3 | 5.3 | 6.6 | 6.6 |
| E | 1.0 | 1.3 | 2.2 | 2.2 |
| L | 5.4 | 5.4 | 5.4 | 7.7 |
| H | | 0.5-0.8 | | |

Nominal capacitance, rated voltage, rated ripple current and case size table

| V uF | 6.3 | | | 10 | | | 16 | | | 25 | | | 35 | | | |
|---------|-----------|----------------|----------|-----------|----------------|----------|-----------|----------------|----------|-----------|----------------|----------|-----------|----------------|----------|----|
| | D×L mm | impedance Ω | I~ mA | |
| 1.0 | | | | | | | | | | | | | | 4×5.4 | 5.0 | 50 |
| 1.5 | | | | | | | | | | | | | | 4×5.4 | 5.0 | 50 |
| 2.2 | | | | | | | | | | | | | | 4×5.4 | 5.0 | 50 |
| 3.3 | | | | | | | | | | | | | | 4×5.4 | 5.0 | 50 |
| 4.7 | | | | | | | | | | 4×5.4 | 5.0 | 50 | 4×5.4 | 5.0 | 50 | |
| 6.8 | | | | | | | | | | 4×5.4 | 5.0 | 80 | 5×5.4 | 2.6 | 80 | |
| 10 | | | | | | 4×5.4 | 5.0 | 50 | 5×5.4 | 2.6 | 80 | 5×5.4 | 2.6 | 80 | | |
| 15 | | | | | | 5×5.4 | 2.6 | 80 | 6.3×5.4 | 1.3 | 115 | 6.3×5.4 | 1.3 | 115 | | |
| 22 | 4×5.4 | 5.0 | 50 | 5×5.4 | 2.6 | 80 | 5×5.4 | 2.6 | 80 | 6.3×5.4 | 1.3 | 115 | 6.3×5.4 | 1.3 | 115 | |
| 33 | 5×5.4 | 2.6 | 80 | 5×5.4 | 2.6 | 80 | 6.3×5.4 | 1.3 | 115 | 6.3×5.4 | 1.3 | 115 | 6.3×7.7 | 0.8 | 150 | |
| 47 | 5×5.4 | 2.6 | 80 | 6.3×5.4 | 1.3 | 115 | 6.3×5.4 | 1.3 | 115 | 6.3×7.7 | 0.8 | 150 | 6.3×7.7 | 0.8 | 150 | |
| 68 | 6.3×5.4 | 1.3 | 115 | 6.3×5.4 | 1.3 | 115 | 6.3×7.7 | 0.8 | 150 | 6.3×7.7 | 0.8 | 150 | | | | |
| 100 | 6.3×5.4 | 1.3 | 115 | 6.3×7.7 | 0.8 | 150 | 6.3×7.7 | 0.8 | 150 | | | | | | | |
| 150 | 6.3×7.7 | 0.8 | 150 | 6.3×7.7 | 0.8 | 150 | | | | | | | | | | |
| 220 | 6.3×7.7 | 0.8 | 150 | | | | | | | | | | | | | |

Frequency coefficient of ripple cument

| Frequency | 50Hz | 120Hz | 300Hz | 1KHz | ≥10KHz |
|-------------|------|-------|-------|------|--------|
| Coefficient | 0.64 | 0.50 | 0.64 | 0.85 | 1.00 |