

Vertical SMD Type, Long Life and Low Impedance Capacitors

For LCD MT/T

LOW ESR Long Life

Guaranteed 3000~5000 hours at 105°C

RoHS compliant

Halogen-free

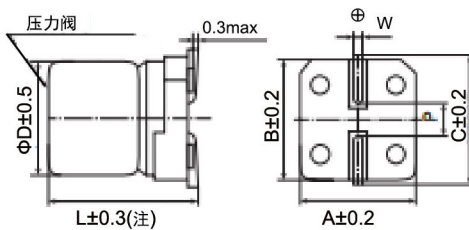


Specifications

| No. | Item | Performance | | | | | | | |
|-----|--|---|--|------|------|----------------|------|------|--|
| 1 | Temperature range(°C) | -40 to +105 | | | | | | | |
| 2 | Rated Voltage Range | 6.3-50VDC | | | | | | | |
| 3 | Leakage current (µA) | Rated Voltage (VDC) | 6.3-50 | | | | | | |
| | | 1 ≦ 0.01CV or 3uA, whichever is greater (at 20°C, 2minutes) | | | | | | | |
| 4 | Capacitance tolerance (%) | ±20 (20°C, 120Hz) | | | | | | | |
| 5 | Tangent of the loss angle (Tan δ) | Rated voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | | Tanδ(max) | 0.30 | 0.26 | 0.22 | 0.16 | 0.13 | 0.13 | |
| | | 0.02 is added to each 1000uF increase over 1000uF (20°C, 120Hz) | | | | | | | |
| 6 | Low temperature characteristics Impedance ratio (max) | Rated voltage(V) | 6.3 | 10 | 16 | 25 | 35 | 50 | |
| | | Z(-25°C)/Z(+20°C) | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | Z(-40°C)/Z(+20°C) | 3 | 3 | 3 | 3 | 3 | 3 | |
| 7 | Endurance (105°C) (Applied ripple current) | Test time | The following specifications shall be satisfied when the capacitors are restores to 20°C after the rated voltage is applied for 3,000~5,000 hours at 105°C. | | | | | | |
| | | ΦD | 4x5.7~6.3x7.7 | | | 8x10.5~10x10.5 | | | |
| | | Load life | 3000 | | | 5000 | | | |
| | | Rated Voltage(VDC) | 6.3-50 | | | | | | |
| | | Leakage current | The initial specified value or less | | | | | | |
| | | Percentage of capacitance change | Within ± 30% of initial value | | | | | | |
| | | Tangent of the loss angle | 300% or less of the initial specified value | | | | | | |
| 8 | Shelf life (105°C) | Test time | The following specifications shall be satisfied when the capacitors are restores to 20°C after exposing them for 1000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum for 30 minutes, at least 24 hours and not more than 48 hours before the measurements. | | | | | | |
| | | Rated Voltage(VDC) | 6.3-50 | | | | | | |
| | | Leakage current | The initial specified value or less | | | | | | |
| | | Percentage of capacitance change | Within ± 30% of initial value | | | | | | |
| | | Tangent of the loss angle | 300% or less of the initial specified value | | | | | | |



Dimensions

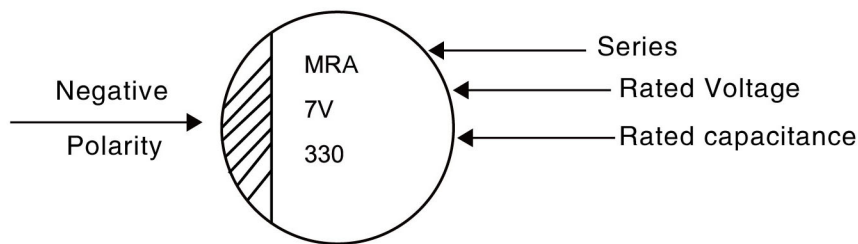


: Dummy terminals

Note1: $L \pm 0.5$ for 8x7(F070)-10x10.5(G105)

| Case Code | D | L | A | B | C | W | P |
|-----------|-----|------|------|------|------|---------|-----|
| B057 | 4 | 5.7 | 4.3 | 4.3 | 5.1 | 0.5-0.8 | 1.0 |
| C057 | 5 | 5.7 | 5.3 | 5.3 | 5.9 | 0.5-0.8 | 1.4 |
| E057 | 6.3 | 5.7 | 6.6 | 6.6 | 7.2 | 0.5-0.8 | 1.9 |
| E077 | 6.3 | 7.7 | 6.6 | 6.6 | 7.2 | 0.5-0.8 | 1.9 |
| F105 | 8 | 10.5 | 8.3 | 8.3 | 9.0 | 0.7-1.1 | 3.1 |
| G105 | 10 | 10.5 | 10.3 | 10.3 | 11.0 | 0.7-1.1 | 4.7 |

Marking



Coefficient of Frequency for Ripple Current

| Frequency (Hz) capacitance(uF) | Frequency (Hz) | | | |
|-----------------------------------|----------------|------|------|------|
| | 120 | 1K | 10K | 100K |
| 1.0 to 4.7 | 0.35 | 0.70 | 0.9 | 1.0 |
| 10 to 100 | 0.40 | 0.75 | 0.9 | 1.0 |
| 150 to 470 | 0.50 | 0.85 | 0.94 | 1.0 |
| 1000 | 0.60 | 0.87 | 0.95 | 1.0 |



Dimension: Φ DXL(mm)

Ripple Current: mA/rms at 100KHz, 105°C

DIMENSION & PERMISSIBLE RIPPLE CURRENT

| V.DC Contents μ F | 6.3V | | | 10V | | | 16V | | | 25V | | |
|-----------------------------|------------|---------------------------------------|--------------------------------------|------------|---------------------------------------|--------------------------------------|------------|---------------------------------------|--------------------------------------|------------|---------------------------------------|--------------------------------------|
| | Φ DXL | Impedance Ω /100KHz 20°C | Ripple Current (mA/rms, 105°C) | Φ DXL | Impedance Ω /100KHz 20°C | Ripple Current (mA/rms, 105°C) | Φ DXL | Impedance Ω /100KHz 20°C | Ripple Current (mA/rms, 105°C) | Φ DXL | Impedance Ω /100KHz 20°C | Ripple Current (mA/rms, 105°C) |
| 10 | | | | | | | | | | 4X5.7 | 1.93 | 90 |
| 22 | 4X5.7 | 1.93 | 90 | 4X5.7 | 1.93 | 90 | 5X5.7 | 1.0 | 150 | 5X5.7 | 1.0 | 150 |
| 33 | 4X5.7 | 1.93 | 90 | 5X5.7 | 1.0 | 150 | 6.3X5.7 | 0.52 | 200 | 6.3X5.7 | 0.52 | 200 |
| 47 | 5X5.7 | 1.0 | 150 | 6.3X5.7 | 0.52 | 200 | 6.3X5.7 | 0.52 | 200 | 6.3X7.7 | 0.52 | 230 |
| 100 | 6.3X5.7 | 0.52 | 200 | 6.3X5.7 | 0.52 | 200 | 6.3X7.7 | 0.34 | 230 | 6.3X7.7 | 0.34 | 230 |
| 150 | 6.3X7.7 | 0.30 | 230 | 6.3X7.7 | 0.34 | 230 | 8X10.5 | 0.22 | 400 | 8X10.5 | 0.16 | 500 |
| 220 | 6.3X7.7 | 0.30 | 230 | 8X10.5 | 0.16 | 400 | 8X10.5 | 0.22 | 400 | 8X10.5 | 0.16 | 500 |
| 330 | 8X10.5 | 0.16 | 400 | 8X10.5 | 0.16 | 400 | 8X10.5 | 0.16 | 400 | 10X10.5 | 0.12 | 600 |
| 470 | 8X10.5 | 0.16 | 400 | 10X10.5 | 0.12 | 600 | 10X10.5 | 0.12 | 600 | | | |
| 1000 | 10X10.5 | 0.12 | 600 | | | | | | | | | |

| V.DC Contents μ F | 35V | | | 50V | | |
|-----------------------------|------------|---------------------------------------|--------------------------------------|------------|---------------------------------------|--------------------------------------|
| | Φ DXL | Impedance Ω /100KHz 20°C | Ripple Current (mA/rms, 105°C) | Φ DXL | Impedance Ω /100KHz 20°C | Ripple Current (mA/rms, 105°C) |
| 1.0 | | | | 4X5.7 | 5.0 | 90 |
| 2.2 | | | | 4X5.7 | 5.0 | 90 |
| 3.3 | | | | 4X5.7 | 5.0 | 90 |
| 4.7 | 4X5.7 | 1.93 | 90 | 5X5.7 | 4.0 | 150 |
| 10 | 5X5.7 | 1.0 | 150 | 6.3X5.7 | 2.60 | 200 |
| 22 | 5X5.7 | 1.0 | 150 | 6.3X7.7 | 1.3 | 230 |
| 33 | 6.3X5.7 | 0.52 | 200 | 8X10.5 | 0.5 | 400 |
| 47 | 6.3X7.7 | 0.34 | 230 | 10X10.5 | 0.34 | 600 |
| 68 | 6.3X7.7 | 0.34 | 230 | 10X10.5 | 0.34 | 600 |
| 100 | 8X10.5 | 0.16 | 400 | 10X10.5 | 0.34 | 600 |
| 150 | 10X10.5 | 0.12 | 600 | | | |
| 220 | 10X10.5 | 0.12 | 600 | | | |

