

HV 125°C High temperature



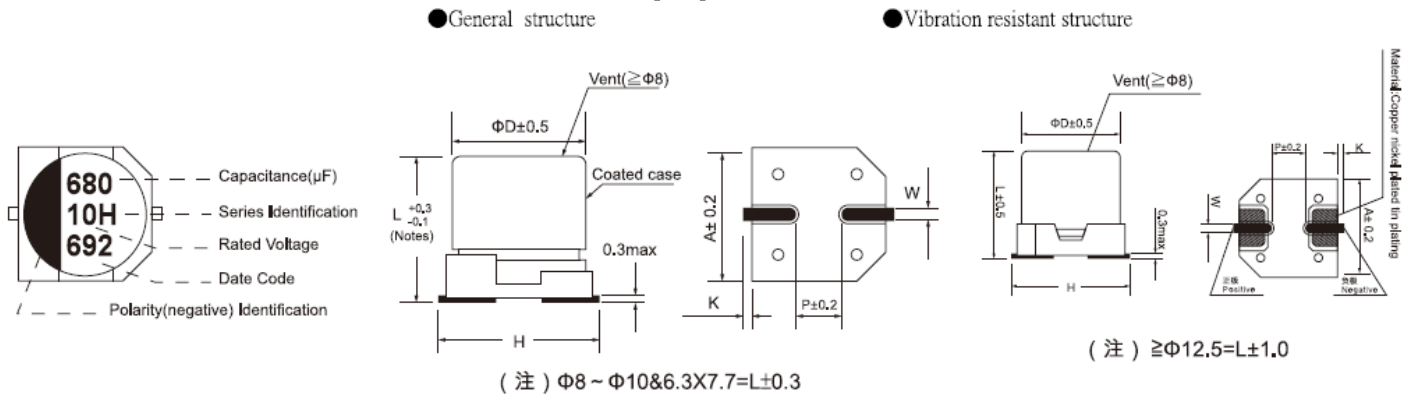
- Endurance: 125°C, 1000~2000 hours
- Recommended Applications: Automatic Mounting and Reflow Soldering, Industrial, Automobile, Meter
- Corresponding product to RoHS

Specifications

| Item | Characteristics | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|----------------------|--|----|--------------------|---|----|----------|---------------|----------------------|------|---------|---------|--------------------|-----------------------------------|---|---|---|---|--------------------|---|---|---|---|---|
| Category Temperature Range | -40 ~ +125°C | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 10 ~ 50VDC | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated Capacitance Range | 47~ 1000 μ F | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | $\pm 20\%$ at 120Hz, 20°C | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current (20°C) | $I \leq 0.01CV$ or $3 \mu A$, whichever is greater. (After rated voltage applied for 2 minutes) I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor(MAX) (tan δ) (120Hz, 20°C) | Shown in the table of standard rating | | | | | | | | | | | | | | | | | | | | | | | | |
| Low Temperature Stability Impedance Ratio (MAX) | <table border="1"> <thead> <tr> <th>WV</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z(120HZ)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Z(-25°C) / Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C) / Z(20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table> | WV | 10 | 16 | 25 | 35 | 50 | Z(120HZ) | | | | | | Z(-25°C) / Z(20°C) | 2 | 2 | 2 | 2 | 2 | Z(-40°C) / Z(20°C) | 3 | 3 | 3 | 3 | 3 |
| WV | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | | | | |
| Z(120HZ) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z(-25°C) / Z(20°C) | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | |
| Z(-40°C) / Z(20°C) | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | |
| Endurance | <p>After applying rated voltage for 1000~2000hrs at 125°C, Stay back to 20 °C temperature measurement, the capacitors shall meet the following requirements.</p> <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td colspan="2">Within $\pm 20\%$ of the initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td colspan="2">Not more than 200% of the specified value</td> </tr> <tr> <td>DΦ</td> <td>6.3x7.7-8x6.2</td> <td>$\geq 8 \times 10.2$</td> </tr> <tr> <td>Life</td> <td>1000hrs</td> <td>2000hrs</td> </tr> <tr> <td>Leakage Current</td> <td colspan="2">Not more than the specified value</td> </tr> </tbody> </table> | Capacitance Change | Within $\pm 20\%$ of the initial value | | Dissipation Factor | Not more than 200% of the specified value | | D Φ | 6.3x7.7-8x6.2 | $\geq 8 \times 10.2$ | Life | 1000hrs | 2000hrs | Leakage Current | Not more than the specified value | | | | | | | | | | |
| Capacitance Change | Within $\pm 20\%$ of the initial value | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor | Not more than 200% of the specified value | | | | | | | | | | | | | | | | | | | | | | | | |
| D Φ | 6.3x7.7-8x6.2 | $\geq 8 \times 10.2$ | | | | | | | | | | | | | | | | | | | | | | | |
| Life | 1000hrs | 2000hrs | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current | Not more than the specified value | | | | | | | | | | | | | | | | | | | | | | | | |
| Shelf Life | After placed at 125°C without voltage applied for 1000 hours, Stay back to 20 °C temperature measurement, the capacitor shall meet the same requirement as Endurance. | | | | | | | | | | | | | | | | | | | | | | | | |

MARKING

Dimensions [mm]



| Dimensions | ΦD | L | A | H | W | P | K |
|------------|------|------|------|----------|----------------|-----|-----------------|
| E04 | 6.3 | 7.7 | 6.6 | 7.8 Max | 0.65 \pm 0.1 | 1.8 | 0.35+0.15/-0.2 |
| G02 | 8.0 | 6.2 | 8.3 | 9.5 Max | 0.65 \pm 0.1 | 2.2 | 0.35+0.15/-0.2 |
| G03 | 8.0 | 10.2 | 8.3 | 10.0 Max | 0.90 \pm 0.2 | 3.1 | 0.70 \pm 0.20 |
| H03 | 10.0 | 10.2 | 10.3 | 12.0 Max | 0.90 \pm 0.2 | 4.6 | 0.70 \pm 0.20 |

Multiplier for Ripple Current

| | | | | |
|----------------|------|------|------|------|
| Frequency (Hz) | 120 | 1K | 10K | 100K |
| Coefficient | 0.70 | 0.80 | 0.90 | 1.00 |

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■ STANDARD RATINGS

| Rated Voltage (SurageVoltage) (V) | Cap (μ F) | Case size Φ DxL(mm) | $\tan \delta$ (%) | Ripple current (mA/rms 125°C) (120Hz) | Rated Voltage (SurageVoltage) (V) | Cap (μ F) | Case size Φ DxL(mm) | $\tan \delta$ (%) | Ripple current (mA/rms 125°C) (120Hz) |
|---|-------------------|-----------------------------|----------------------|---|---|-------------------|-----------------------------|----------------------|---|
| 10(13) | 100 | 8X6.2 | 0.26 | 75 | 35(44) | 10 | 8x6.2 | 0.14 | 40 |
| | 150 | 6.3x7.7 | 0.26 | 70 | | | 8x10.2 | 0.14 | 50 |
| | | 8x6.2 | 0.26 | 75 | | 22 | 6.3x7.7 | 0.14 | 70 |
| | 220 | 8x10.2 | 0.26 | 130 | | | 6.3x7.7 | 0.14 | 70 |
| | | 330 | 8x10.2 | 0.26 | | 130 | 8x6.2 | 0.14 | 75 |
| | 470 | | 8x10.2 | 0.26 | | 130 | 47 | 6.3x7.7 | 0.14 |
| | | 10x10.2 | 0.26 | 180 | | 8X6.2 | | 0.14 | 75 |
| | 680 | 10x10.2 | 0.26 | 180 | | 8x10.2 | | 0.14 | 130 |
| 1000 | | 10x10.2 | 0.26 | 180 | | 100 | 8x6.2 | 0.14 | 75 |
| | 16(20) | 47 | 6.3x7.7 | 0.20 | | | 70 | 8x10.2 | 0.14 |
| 6.3x7.7 | | | 0.20 | 70 | | | 10x10.2 | 0.14 | 180 |
| 8x6.2 | | | 0.20 | 75 | | | 120 | 8x10.2 | 0.14 |
| 150 | | 8x10.2 | 0.20 | 130 | | 10x10.2 | | 0.14 | 180 |
| | | 220 | 8x10.2 | 0.20 | | 130 | 150 | 8x10.2 | 0.14 |
| 330 | | | 8x10.2 | 0.20 | | 180 | | 10x10.2 | 0.14 |
| | | 470 | 10x10.2 | 0.20 | | 180 | 50(63) | 10 | 8x6.2 |
| 25(32) | 47 | | 6.3x7.7 | 0.18 | 70 | 8x10.2 | | | 0.12 |
| | | 8x6.2 | 0.18 | 75 | 22 | 6.3x7.7 | | 0.12 | 70 |
| | | 6.3x7.7 | 0.18 | 70 | | 8x6.2 | | 0.12 | 75 |
| | 100 | 8x6.2 | 0.18 | 75 | 33 | 8x10.2 | | 0.12 | 130 |
| | | 8x10.2 | 0.18 | 130 | 47 | 8x10.2 | | 0.12 | 130 |
| | 150 | 8x10.2 | 0.18 | 130 | 82 | 8x10.2 | | 0.12 | 130 |
| 220 | | 8x10.2 | 0.18 | 130 | 100 | 10x10.2 | | 0.12 | 180 |
| | 330 | 10x10.2 | 0.18 | 180 | 150 | 10x10.2 | | 0.12 | 180 |
| | | | | | 220 | 10x10.2 | | 0.12 | 180 |