

- Load life of 2000 hours at 105°C
- High ripple current
- Low Profile

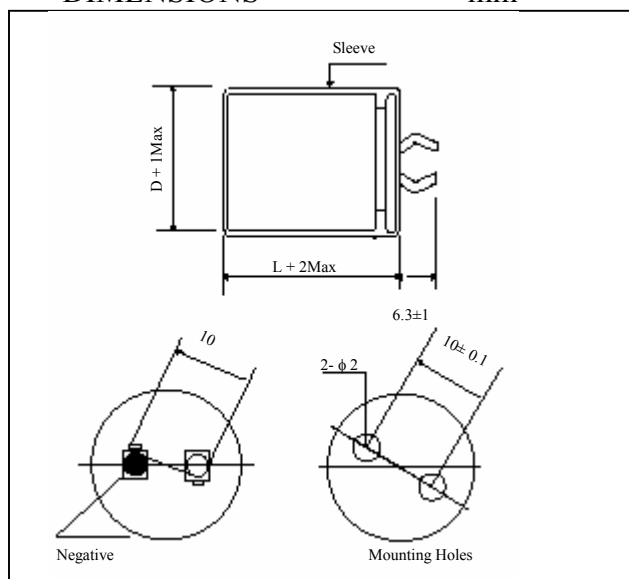


■ SPECIFICATIONS

| Item | Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|---------------|------------|-----------------|-----------------------------------|--------------------|----------------------------------|--------------------|---|---------|-------------------|---------------|----|----|----|----|----|----|-----|---------|---------|-------|------|------|------|------|------|------|------|------|------|------|
| | Operating Temperature Range (°C) | -40~+105 | -25~+105 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage range (V) | 10~100 V.DC | 160~400V.DC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance (25°C, 120Hz) | ± 20% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage current (μ A)(25°C) | 0.01CV or 1.5mA whichever is smaller (after 5 minute application of rated voltage) C: Nominal Capacitance (μ F), V: Rated Voltage (V) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor (25°C,120Hz) | <table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> <th>160~250</th> <th>315~400</th> </tr> </thead> <tbody> <tr> <td>tan δ</td> <td>0.55</td> <td>0.50</td> <td>0.45</td> <td>0.40</td> <td>0.35</td> <td>0.30</td> <td>0.25</td> <td>0.20</td> <td>0.15</td> <td>0.20</td> </tr> </tbody> </table> | | | | | | | | | | | Rated Voltage (V) | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160~250 | 315~400 | tan δ | 0.55 | 0.50 | 0.45 | 0.40 | 0.35 | 0.30 | 0.25 | 0.20 | 0.15 | 0.20 |
| | Rated Voltage (V) | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | 160~250 | 315~400 | | | | | | | | | | | | | | | | | | | | | | |
| tan δ | 0.55 | 0.50 | 0.45 | 0.40 | 0.35 | 0.30 | 0.25 | 0.20 | 0.15 | 0.20 | | | | | | | | | | | | | | | | | | | | | | | |
| Temperature Stability (120Hz) | <table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>10~100</th> <th>160~200</th> <th>250~450</th> </tr> </thead> <tbody> <tr> <td>Impedance</td> <td>Z-25°C/Z+20°C</td> <td>3</td> <td>3</td> <td>8</td> </tr> <tr> <td>Ratio</td> <td>Z-40°C/Z+20°C</td> <td>12</td> <td>-</td> <td>-</td> </tr> </tbody> </table> | | Rated Voltage | 10~100 | 160~200 | 250~450 | Impedance | Z-25°C/Z+20°C | 3 | 3 | 8 | Ratio | Z-40°C/Z+20°C | 12 | - | - | | | | | | | | | | | | | | | | | |
| | Rated Voltage | 10~100 | 160~200 | 250~450 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Impedance | Z-25°C/Z+20°C | 3 | 3 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ratio | Z-40°C/Z+20°C | 12 | - | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Load Life (+105°C) | <table border="1"> <tbody> <tr> <td>Life Time</td> <td>2000 hours</td> </tr> <tr> <td>Leakage current</td> <td>Not more than the specified value</td> </tr> <tr> <td>Capacitance change</td> <td>Within ±20% of the initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value</td> </tr> </tbody> </table> | | Life Time | 2000 hours | Leakage current | Not more than the specified value | Capacitance change | Within ±20% of the initial value | Dissipation Factor | Not more than 200% of the specified value | | | | | | | | | | | | | | | | | | | | | | | |
| | Life Time | 2000 hours | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Leakage current | Not more than the specified value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Capacitance change | Within ±20% of the initial value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Dissipation Factor | Not more than 200% of the specified value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| After 2000 hours application of rated voltage at 105°C (with rated ripple current) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shelf Life (+105°C) | 1000 hours with no voltage applied, the capacitor shall meet the specified limits for "Load Life". | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *After test: (V) to be applied for 30 minutes, 24 to 48 hours before measurement. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

■ DIMENSIONS

mm



■ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

| Rated Voltage (V) | Frequency (Hz) | | | |
|-------------------|----------------|------|------|------|
| | 120 | 500 | 1K | 10K |
| 10~100 | 1.0 | 1.05 | 1.10 | 1.15 |
| 160~250 | 1.0 | 1.14 | 1.14 | 1.18 |
| 315~400 | 1.0 | 1.05 | 1.10 | 1.15 |

■ STANDARD RATINGS

| Wv(V) Φ DxL(mm) | 10 | | 16 | | 25 | | 35 | | 50 | | 63 | | 80 | | 100 | |
|--------------------|-------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|--------|-----|--------|
| | Cap | Ripple | Cap | Ripple | Cap | Ripple | Cap | Ripple | Cap | Ripple | Cap | Ripple | Cap | Ripple | Cap | Ripple |
| | μ F | Arms | μ F | Arms | μ F | Arms | μ F | Arms | μ F | Arms | μ F | Arms | μ F | Arms | μ F | Arms |
| 22x20 | 4700 | 0.98 | 3300 | 1.06 | 2200 | 0.98 | 1500 | 0.80 | 1000 | 0.87 | 680 | 0.83 | 470 | 0.65 | 330 | 0.60 |
| 22x20 | - | - | - | - | - | - | - | - | - | - | - | - | 560 | 0.70 | - | - |
| 25x20 | 5600 | 1.16 | 3900 | 1.25 | 2700 | 1.08 | 1800 | 0.94 | 1200 | 1.02 | 820 | 0.99 | 680 | 0.84 | 390 | 0.71 |
| 25x20 | 6800 | 1.31 | 4700 | 1.38 | 3300 | 1.29 | 2200 | 1.04 | 1500 | 1.15 | 1000 | 1.10 | - | - | 470 | 0.78 |
| 30x20 | 8200 | 1.59 | 5600 | 1.68 | 3900 | 1.58 | 2700 | 1.29 | 1800 | 1.34 | 1200 | 1.20 | 820 | 1.04 | 560 | 0.95 |
| 30x20 | 10000 | 1.77 | 6800 | 1.80 | 4700 | 1.61 | 3300 | 1.45 | 2200 | 1.60 | 1500 | 1.47 | 1000 | 1.19 | 680 | 1.09 |
| 30x20 | - | - | - | - | - | - | - | - | - | - | 1800 | 1.52 | 1200 | 1.44 | 820 | 1.32 |

| Wv (V) Φ DxL(mm) | 160 | | 180 | | 200 | | 250 | | 315 | | 350 | | 400 | |
|---------------------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| | Cap | Ripple | Cap | Ripple | Cap | Ripple | Cap | Ripple | Cap | Ripple | Cap | Ripple | Cap | Ripple |
| | μ F | Arms | μ F | Arms | μ F | Arms | μ F | Arms | μ F | Arms | μ F | Arms | μ F | Arms |
| 22x20 | 120 | 0.53 | 100 | 0.50 | 100 | 0.51 | 68 | 0.39 | 47 | 0.28 | 39 | 0.27 | 33 | 0.25 |
| 22x20 | 150 | 0.59 | 120 | 0.54 | 120 | 0.56 | 82 | 0.45 | - | - | - | - | - | - |
| 25x20 | 180 | 0.70 | 150 | 0.63 | 150 | 0.65 | 100 | 0.59 | 56 | 0.34 | 47 | 0.31 | 39 | 0.28 |
| 25x20 | 220 | 0.75 | 180 | 0.70 | - | - | 120 | 0.62 | 68 | 0.39 | 56 | 0.34 | 47 | 0.31 |
| 30x20 | 270 | 0.95 | 220 | 0.85 | 180 | 0.78 | 150 | 0.76 | 82 | 0.45 | 68 | 0.40 | 56 | 0.36 |
| 30x20 | 330 | 1.05 | 270 | 0.95 | 220 | 0.85 | 180 | 0.79 | 100 | 0.49 | 82 | 0.45 | 68 | 0.40 |

Ripple Current: 105°C, 120Hz