

- Load life of 1000 hours at 85°C
- 5mm Height
- VTR, digital cameras, car radios, micro, cassette tape recorder, etc.

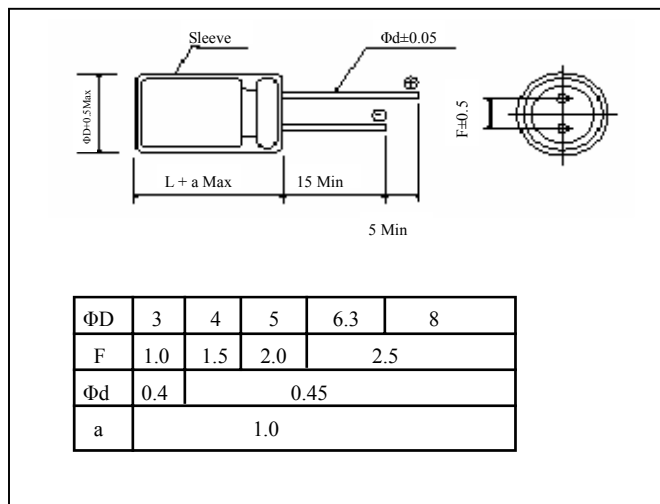


■ SPECIFICATIONS

| Item | Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|-----------------|-----------------------------------|--------------------|----------------------------------|--------------------|-------------------------------------------|----|-----------------|---------------|------|------|------|------|------|------|------|---------------|------|------|------|------|------|------|------|
| Operating Temperature Range | -40~+85 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance (25°C,120Hz) | ±20% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current (µA) | 0.01CV or 3, whichever is greater (at 25°C, after 2 minutes) C: Nominal Capacitance (µF), V: Rated Voltage (V) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor (25°C,120Hz) | <table border="1"> <thead> <tr> <th colspan="2">Rated voltage (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Tanδ</td> <td>Φ3~Φ6.3</td> <td>0.35</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> <tr> <td>Φ8</td> <td>0.39</td> <td>0.28</td> <td>0.24</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </tbody> </table> | Rated voltage (V) | | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | Tanδ | Φ3~Φ6.3 | 0.35 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | Φ8 | 0.39 | 0.28 | 0.24 | 0.16 | 0.14 | 0.12 | 0.10 |
| Rated voltage (V) | | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | | | |
| Tanδ | Φ3~Φ6.3 | 0.35 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | | | | | | | | | | | | | | | | | | | |
| | Φ8 | 0.39 | 0.28 | 0.24 | 0.16 | 0.14 | 0.12 | 0.10 | | | | | | | | | | | | | | | | | | | |
| Temperature Stability (120Hz) | <table border="1"> <thead> <tr> <th colspan="2">Rated voltage (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Impedance ratio</td> <td>Z-25°C/Z+20°C</td> <td>6</td> <td>4</td> <td>3</td> <td colspan="2">2</td> <td colspan="2"></td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>16</td> <td>10</td> <td>8</td> <td>6</td> <td colspan="3">4</td> </tr> </tbody> </table> | Rated voltage (V) | | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | Impedance ratio | Z-25°C/Z+20°C | 6 | 4 | 3 | 2 | | | | Z-40°C/Z+20°C | 16 | 10 | 8 | 6 | 4 | | |
| Rated voltage (V) | | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | | | |
| Impedance ratio | Z-25°C/Z+20°C | 6 | 4 | 3 | 2 | | | | | | | | | | | | | | | | | | | | | | |
| | Z-40°C/Z+20°C | 16 | 10 | 8 | 6 | 4 | | | | | | | | | | | | | | | | | | | | | |
| Load Life (+85°C) | <table border="1"> <thead> <tr> <th>Time</th> <th>1000 hours</th> </tr> </thead> <tbody> <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> | Time | 1000 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 | | | | | | | | | | | | | | | | | | |
| Time | 1000 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 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shelf life (+85°C) | 500 hours. Not voltage applied. After test: (V) to be applied for 30 minutes, 24 to 48 hours before measurement. | | | | | | | | | | | | | | | | | | | | | | | | | | |

■ DIMENSIONS

mm



■ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

| Rated volts (V) | Freq (Hz) | | | |
|-----------------|-----------|-----|-----|----------|
| | 50,60 | 120 | 1K | 10K,100K |
| 4~16 | 0.8 | 1 | 1.1 | 1.2 |
| 25~35 | 0.8 | 1 | 1.5 | 1.7 |
| 50 | 0.8 | 1 | 1.6 | 1.9 |

Temperature coefficient

| Temperature (°C) | +70 | +85 |
|------------------|------|-----|
| Factor | 1.35 | 1 |

■ STANDARD RATINGS

| Cap (μF) | Wv (V) | 4 | | 6.3 | | 10 | | 16 | | 25 | | 35 | | 50 | | |
|----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|----|
| | Item | Size (mm) | Ripple | Size (mm) | Ripple | Size (mm) | Ripple | Size (mm) | Ripple | Size (mm) | Ripple | Size (mm) | Ripple | Size (mm) | Ripple | |
| | | ΦDxL | mArms | ΦDxL | mArms | ΦDxL | mArms | ΦDxL | mArms | ΦDxL | mArms | ΦDxL | mArms | ΦDxL | mArms | |
| 0.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | 3x5 | 3 | |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | 4x5 | 3 | |
| 0.22 | - | - | - | - | - | - | - | - | - | - | - | - | - | 3x5 | 4 | |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | 4x5 | 5 | |
| 0.33 | - | - | - | - | - | - | - | - | - | - | - | - | - | 3x5 | 5 | |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | 4x5 | 6 | |
| 0.47 | - | - | - | - | - | - | - | - | - | - | - | - | - | 3x5 | 6 | |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | 4x5 | 7 | |
| 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | 3x5 | 8 | |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | 4x5 | 10 | |
| 2.2 | - | - | - | - | - | - | - | - | - | - | - | - | 3x5 | 11 | 4x5 | 15 |
| | - | - | - | - | - | - | - | - | - | - | - | - | 4x5 | 14 | | |
| 3.3 | - | - | - | - | - | - | - | - | - | 3x5 | 13 | 4x5 | 17 | 4x5 | 18 | |
| | - | - | - | - | - | - | - | - | 4x5 | 15 | | | | | | |
| 4.7 | - | - | - | - | - | - | - | 3x5 | 14 | 4x5 | 18 | 4x5 | 20 | 5x5 | 25 | |
| | - | - | - | - | - | - | - | 4x5 | 17 | | | | | | | |
| 10 | - | - | 3x5 | 17 | 4x5 | 22 | 4x5 | 25 | 5x5 | 30 | 5x5 | 30 | 6.3x5 | 40 | | |
| | - | - | 4x5 | 20 | | | | | | | | | | | | |
| 22 | 3x5 | 21 | 4x5 | 30 | 5x5 | 35 | 5x5 | 40 | 6.3x5 | 50 | 6.3x5 | 55 | 8x5 | 75 | | |
| | 4x5 | 25 | | | | | | | | | | | | | | |
| 33 | 4x5 | 30 | 5x5 | 40 | 5x5 | 45 | 6.3x5 | 60 | 6.3x5 | 65 | 8x5 | 80 | 8x5 | 90 | | |
| 47 | 4x5 | 35 | 5x5 | 50 | 6.3x5 | 65 | 6.3x5 | 70 | 8x5 | 95 | 8x5 | 100 | - | - | | |
| 100 | 5x5 | 60 | 6.3x5 | 85 | 6.3x5 | 95 | 8x5 | 125 | 8x5 | 135 | - | - | - | - | | |
| 220 | 6.3x5 | 105 | 8x5 | 145 | 8x5 | 155 | - | - | - | - | - | - | - | - | | |
| 330 | 8x5 | 150 | 8x5 | 175 | - | - | - | - | - | - | - | - | - | - | | |
| 470 | 8x5 | 180 | - | - | - | - | - | - | - | - | - | - | - | - | | |

Ripple Current : 85°C, 120Hz