

Datasheet

Aluminium Electrolytic Capacitor, LHK

RS Stock number 707-5701



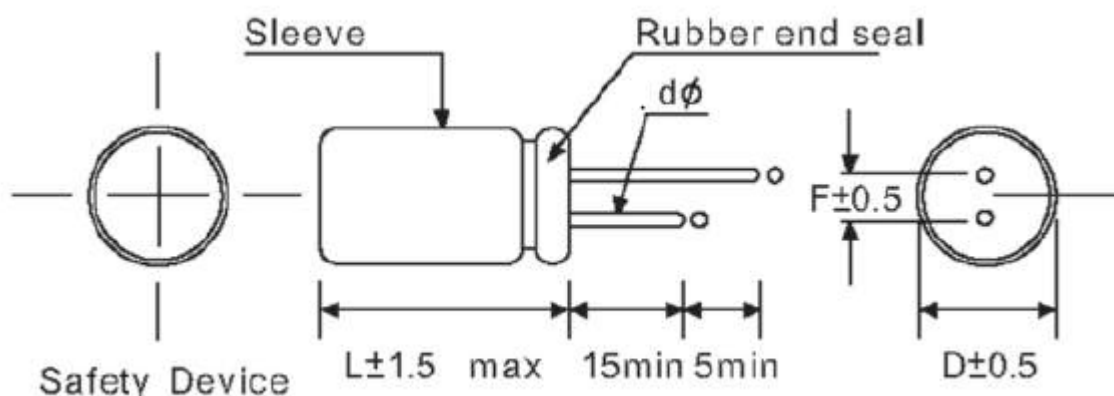
Specifications:

| Item | Performance Characteristics | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|-----------------------|----|-----|----|----|----|----|----|-------------------------|----|----|----|----|----|----|----|-------------------------|----|---|---|---|---|---|---|
| Operating Temperature Range | -40 to +105°C | | | | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 6.3 to 100 VD | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Range | 0.1 to 15000 µF | | | | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ± 20% (120Hz, +20°C) | | | | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current (+20°C max.) | I < 0.01 CV or 3 (µA) After 1 minute whichever is greater measured with rated working voltage applied | | | | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor | <table border="1"> <thead> <tr> <th>Working Voltage (VDC)</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>D.F. (%) max.</td> <td>35</td> <td>24</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> </tr> </tbody> </table> <p>For capacitance > 1000µ F, add 2% per another 1000µ (+20°C at 120Hz)</p> | Working Voltage (VDC) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | D.F. (%) max. | 35 | 24 | 20 | 16 | 14 | 12 | 10 | | | | | | | | |
| Working Voltage (VDC) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | | |
| D.F. (%) max. | 35 | 24 | 20 | 16 | 14 | 12 | 10 | | | | | | | | | | | | | | | | | | |
| Low Temperature Characteristics (at 120Hz) | <p>Impedance ratio max.</p> <table border="1"> <thead> <tr> <th>Working Voltage (VDC)</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>Z (-25°C)/ Z (+20°C)</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z (-40°C)/ Z (+20°C)</td> <td>15</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table> | Working Voltage (VDC) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | Z (-25°C)/ Z (+20°C) | 7 | 4 | 3 | 2 | 2 | 2 | 2 | Z (-40°C)/ Z (+20°C) | 15 | 8 | 6 | 4 | 4 | 4 | 4 |
| Working Voltage (VDC) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | | |
| Z (-25°C)/ Z (+20°C) | 7 | 4 | 3 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | |
| Z (-40°C)/ Z (+20°C) | 15 | 8 | 6 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | |
| Load Life | <p>Test Conditions: Duration time: 1000Hrs Ambient temperature: +105°C Applied voltage: Rated DC working voltage After test requirements : ≤ 25% of the initial measured value Dissipation Factor: ≤ 200% of the initial specified value Leakage Current: ≤ the initial specified value</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| Shelf Life | <p>Test Conditions: Duration time: 1000Hrs Ambient temperature: +105°C Applied voltage: None After test requirements at +20°C: Same limits as load life Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes</p> | | | | | | | | | | | | | | | | | | | | | | | | |

Features:

- Used in communication equipment's, switching power supply, etc.
- Safety vent construction design

Diagram of Dimensions:



(Unit: mm)

| | | | | |
|----------|------|-----|-----|-----|
| D | 4 | 5 | 6.3 | 8 |
| F | 1.5 | 2.0 | 2.5 | 3.5 |
| ϕd | 0.45 | | 0.6 | |

Ripple Current & Temperature

| | | | | | |
|------------------|------|------|------|------|------|
| Temperature (°C) | 45 | 60 | 70 | 85 | 105 |
| Multiplier | 2.10 | 1.90 | 1.65 | 1.40 | 1.00 |

Ripple Current & Frequency Multiplier

| | | | | | | |
|-----------------------------|------|--------|------|------|------|------|
| Cap.(μF) \ Freq.(Hz) | | 50(60) | 120 | 500 | 1K | 10K |
| | | 0.1~47 | 0.65 | 1.0 | 1.20 | 1.30 |
| Multiplier | 56UP | 0.8 | 1.0 | 1.10 | 1.15 | 1.20 |



Case Size

Ø D x L (mm)

| WV {SV} uF | 4 {5} | | 6.3 {8} | | 10 {13} | | 16 {20} | | 25 {32} | | 35 {44} | | 50 {63} | |
|------------------|----------|--------|------------|--------|------------|--------|------------|------------|------------|------------|------------|----------|------------|---------|
| | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 0.1-0.47 | | | | | | | | | | | | | 4x7 | 1.0~5.0 |
| 1 | | | | | | | | | | | | | 4x7 | 10 |
| 2.2 | | | | | | | | | | | | | 4x7 | 19 |
| 3.3 | | | | | | | | | | | | | 4x7 | 24 |
| 4.7 | | | | | | | | | | | | | 4x7 | 29 |
| 10 | | | | | | | | | 4x7 | 30 | 4x7 5x7 | 28 30 | 5x7 | 32 |
| 22 | | | | | 4x7 | 35 | 4x7 | 37 | 4x7 5x7 | 40 45 | 6x7 | 47 | 6x7 | 50 |
| 33 | | | 4x7 | 32 | 4x7 | 40 | 5x7 | 42 | 5x7 | 47 | 6x7 | 52 | 8x7 | 75 |
| 47 | 4x7 | 35 | 4x7 | 40 | 4x7 | 48 | 5x7 | 60 | 6x7 | 65 | 6x7 | 70 | 8x7 | 85 |
| 68 | 5x7 | 55 | 5x7 | 55 | 5x7 | 60 | 6x7 | 72 | 6x7 | 75 | 8x7 | 84 | 8x9 | 97 |
| 100 | 5x7 | 58 | 5x7 | 65 | 5x7 | 80 | 6x7 | 92 | 6x7 8x7 | 100 125 | 8x7 | 145 | - | - |
| 220 | 5x7 | 80 | 5x7 | 80 | 6x7 | 105 | 6x7 8x7 | 125 145 | 8x9 | 155 | - | - | - | - |
| 330 | 6x7 | 130 | 6x7 | 130 | 8x7 | 160 | 8x7 | 175 | - | - | - | - | - | - |
| 470 | 8x7 | 180 | 8x7 | 180 | 8x7 | 192 | 8x9 | 245 | - | - | - | - | - | - |

Ripple Current(mA,rms)at105□120Hz