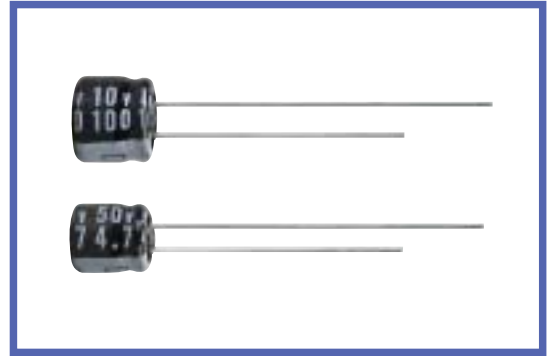


MH5 SERIES

105°C 5mm Height.

◆ FEATURES

- RoHS compliance.


◆ SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | | | | | | | | | |
|--|---|--------------------|-----------------------------------|--------------------|--|-----------------|------------------------------------|----|--------------------|------|------|------|------|------|------|--------------------|---|---|---|---|---|---|
| Category Temperature Range | -40 ~ +105°C | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 6.3 ~ 50V.DC | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ± 20% (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current(MAX) | I=0.01CV or 3 μ A whichever is greater. (After 2 minutes application of rated voltage) I=Leakage Current(μ A) C=Rated Capacitance(μ F) V=Rated Voltage(V) | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor(MAX) (tanδ) | <table border="1"> <thead> <tr> <th>Rated Voltage (V)</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>tanδ</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.13</td> <td>0.12</td> </tr> </tbody> </table> (20°C, 120Hz) | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | tanδ | 0.28 | 0.24 | 0.20 | 0.16 | 0.13 | 0.12 | | | | | | | |
| Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | |
| tanδ | 0.28 | 0.24 | 0.20 | 0.16 | 0.13 | 0.12 | | | | | | | | | | | | | | | | |
| Endurance | After applying rated voltage with rated ripple current for 1000 hrs at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±25% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </tbody> </table> | Capacitance Change | Within ±25% of the initial value. | Dissipation Factor | Not more than 200% of the specified value. | Leakage Current | Not more than the specified value. | | | | | | | | | | | | | | | |
| Capacitance Change | Within ±25% of the initial value. | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor | Not more than 200% of the specified value. | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current | Not more than the specified value. | | | | | | | | | | | | | | | | | | | | | |
| Low Temperature Stability Impedance Ratio(MAX) | <table border="1"> <thead> <tr> <th>Rated Voltage (V)</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>3</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>8</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table> (120Hz) | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | Z(-25°C) / Z(20°C) | 3 | 3 | 2 | 2 | 2 | 2 | Z(-40°C) / Z(20°C) | 8 | 5 | 4 | 3 | 3 | 3 |
| Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | |
| Z(-25°C) / Z(20°C) | 3 | 3 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | |
| Z(-40°C) / Z(20°C) | 8 | 5 | 4 | 3 | 3 | 3 | | | | | | | | | | | | | | | | |

◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

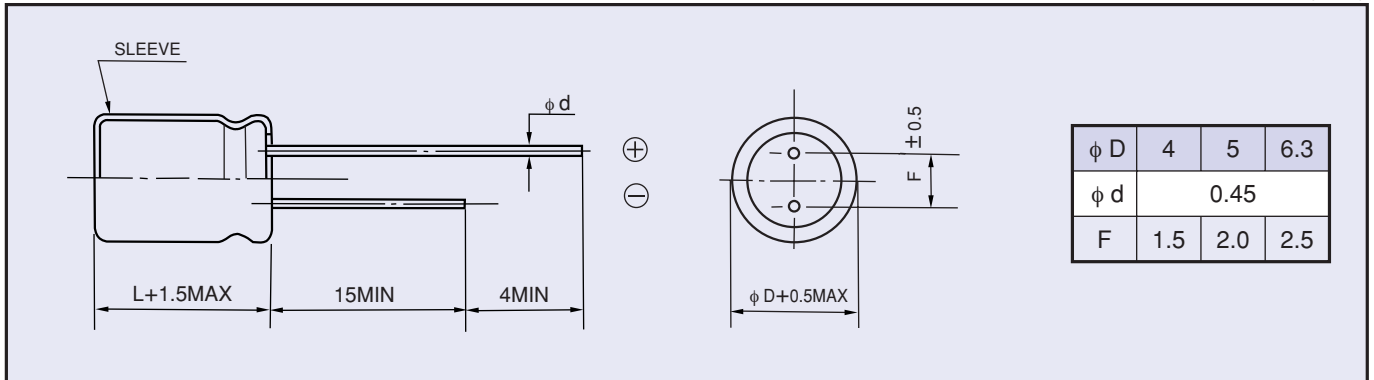
| Frequency (Hz) | | 60(50) | 120 | 500 | 1k | 10k≤ |
|----------------|---------------|--------|-----|------|------|------|
| Coefficient | 0.1 ~ 1 μ F | 0.50 | 1.0 | 1.20 | 1.30 | 1.50 |
| | 2.2 ~ 4.7 μ F | 0.65 | 1.0 | 1.20 | 1.30 | 1.50 |
| | 10 ~ 47 μ F | 0.8 | 1.0 | 1.20 | 1.30 | 1.50 |
| | 100 μ F | 0.8 | 1.0 | 1.10 | 1.15 | 1.20 |

◆ PART NUMBER

| | | | | | | |
|---------------|--------|-------------------|-----------------------|--------|--------------|-----------|
| □□□ | MH5 | □□□□□ | □ | □□□ | □□ | D × L |
| Rated Voltage | Series | Rated Capacitance | Capacitance Tolerance | Option | Lead Forming | Case Size |

◆ DIMENSIONS

(mm)



◆ STANDARD SIZE, RATED RIPPLE CURRENT

Size φ D×L(mm), Ripple Current (mA r.m.s./105°C, 120Hz)

| Cap (μF) | WV (V.DC) | 6.3 (0J) | | 10 (1A) | | 16 (1C) | | 25 (1E) | | 35 (1V) | | 50 (1H) | |
|----------|-----------|----------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 0.1 | | | | | | | | | | | | 4 × 5 | 1 |
| 0.22 | | | | | | | | | | | | 4 × 5 | 2 |
| 0.33 | | | | | | | | | | | | 4 × 5 | 3 |
| 0.47 | | | | | | | | | | | | 4 × 5 | 4 |
| 1 | | | | | | | | | | | | 4 × 5 | 8 |
| 2.2 | | | | | | | | | | | | 4 × 5 | 13 |
| 3.3 | | | | | | | | | | | | 4 × 5 | 14 |
| 4.7 | | | | | | | | | | 4 × 5 | 17 | 5 × 5 | 18 |
| 10 | | | | | | 4 × 5 | 20 | 5 × 5 | 22 | 5 × 5 | 24 | 6.3 × 5 | 28 |
| 22 | | 4 × 5 | 23 | 5 × 5 | 28 | 5 × 5 | 31 | 6.3 × 5 | 44 | 6.3 × 5 | 48 | | |
| 33 | | | 30 | 5 × 5 | 34 | 6.3 × 5 | 48 | 6.3 × 5 | 48 | | | | |
| 47 | | | 37 | 6.3 × 5 | 52 | 6.3 × 5 | 56 | 6.3 × 5 | 56 | | | | |
| 100 | | 6.3 × 5 | 57 | 6.3 × 5 | 62 | 6.3 × 5 | 62 | | | | | | |