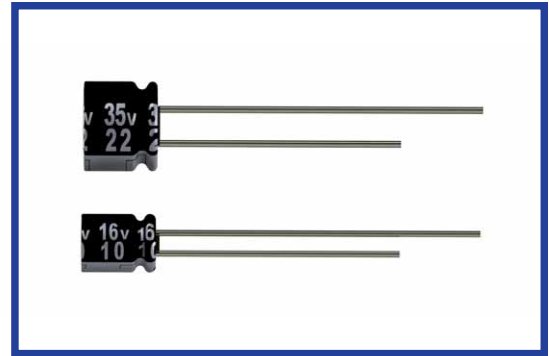


MH5 SERIES

105°C 5mm Height

*Load Life : 105°C 1000 hours.

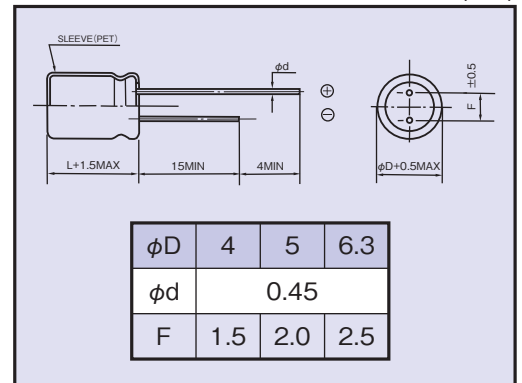


SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | | | | | | | | | |
|--|---|---------------------|-----------------------------------|--------------------|--|-----------------|------------------------------------|----|------------------|------|------|------|------|------|------|------------------|---|---|---|---|---|---|
| Category Temperature Range | -40~+105°C | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 6.3~50Vdc | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current(MAX) | I=0.01CV or 3μA whichever is greater. (After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance(μF) V=Rated Voltage(Vdc) | | | | | | | | | | | | | | | | | | | | | |
| Dissipation Factor(MAX) (tanδ) | <table border="1"> <thead> <tr> <th>Rated Voltage (Vdc)</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 (Vdc) | 6.3 | 10 | 16 | 25 | 35 | 50 | tanδ | 0.28 | 0.24 | 0.20 | 0.16 | 0.13 | 0.12 | | | | | | | |
| Rated Voltage (Vdc) | 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 hours 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 (Vdc)</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 (Vdc) | 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 (Vdc) | 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 | | | | | | | | | | | | | | | | |

DIMENSIONS

(mm)



MULTIPLIER FOR RIPPLE CURRENT

| Frequency (Hz) | 60(50) | 120 | 500 | 1k | 10k≤ | |
|----------------|-----------|------|------|------|------|------|
| Coefficient | 0.47~1μF | 0.50 | 1.00 | 1.20 | 1.30 | 1.50 |
| | 2.2~4.7μF | 0.65 | 1.00 | 1.20 | 1.30 | 1.50 |
| | 10~47μF | 0.80 | 1.00 | 1.20 | 1.30 | 1.50 |
| | 100μF | 0.80 | 1.00 | 1.10 | 1.15 | 1.20 |

STANDARD SIZE Size φD×L(mm), Rated Ripple Current (mA r.m.s./105°C, 120Hz)

| Vdc | Cap (μF) | Size (φD×L) | Rated Ripple Current |
|-----|----------|-------------|----------------------|
| 6.3 | 22 | 4×5 | 23 |
| | 33 | 5×5 | 30 |
| | 47 | 5×5 | 37 |
| | 100 | 6.3×5 | 57 |
| 10 | 22 | 5×5 | 28 |
| | 33 | 5×5 | 34 |
| | 47 | 6.3×5 | 52 |
| | 100 | 6.3×5 | 62 |

| Vdc | Cap (μF) | Size (φD×L) | Rated Ripple Current |
|-----|----------|-------------|----------------------|
| 16 | 10 | 4×5 | 20 |
| | 22 | 5×5 | 31 |
| | 33 | 6.3×5 | 48 |
| | 47 | 6.3×5 | 56 |
| | 100 | 6.3×5 | 62 |
| 25 | 10 | 5×5 | 22 |
| | 22 | 6.3×5 | 44 |
| | 33 | 6.3×5 | 48 |
| | 47 | 6.3×5 | 56 |

| Vdc | Cap (μF) | Size (φD×L) | Rated Ripple Current |
|-----|----------|-------------|----------------------|
| 35 | 4.7 | 4×5 | 17 |
| | 10 | 5×5 | 24 |
| | 22 | 6.3×5 | 48 |
| 50 | 0.47 | 4×5 | 4 |
| | 1 | 4×5 | 8 |
| | 2.2 | 4×5 | 13 |
| | 3.3 | 4×5 | 14 |
| | 4.7 | 5×5 | 18 |
| 10 | 6.3×5 | 28 | |

OPTION

| | Code |
|------------|------|
| PET Sleeve | EFC |

PART NUMBER

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