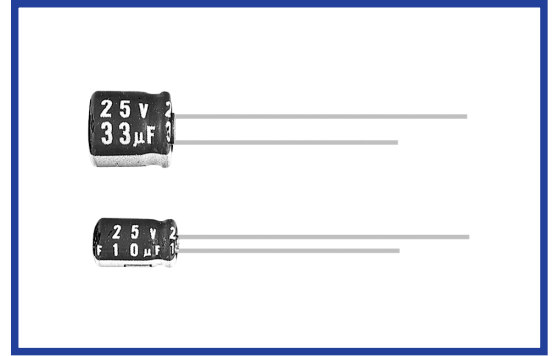


MS7 シリーズ
SERIES

85°C 高さ7mm品
85°C 7mm Height

・85°C 1000時間品。
Load Life : 85°C 1000 hours.



◆規格表 / SPECIFICATIONS

| 項目 Items | 特 性 Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|------|-------------------------------|---|------------------------------|--|-------------------------|---|---------------|----|----|---------------|------------------|------|------|------|------|------|------|------|------|--|------------------|----|----|---|---|---|---|---|---|--|
| カテゴリ温度範囲 Category Temperature Range | -40~+85°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 定格電圧範囲 Rated Voltage Range | 4~63Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 静電容量許容差 Capacitance Tolerance | ±20%(20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏れ電流 Leakage Current(MAX) | I=0.01CV又は3µAのいずれか大なる値以下(定格電圧印加2分後) I=0.01CV or 3µA whichever is greater. (After 2 minutes application of rated voltage) I=漏れ電流(µA) C=静電容量(µF) V=定格電圧(Vdc) Leakage Current Capacitance Rated Voltage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 損失角の正接 (tanδ) Dissipation Factor(MAX) | <table border="1"> <tr> <td>定格電圧(Vdc) Rated Voltage</td> <td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td> <td>(20°C, 120Hz)</td> </tr> <tr> <td>tanδ</td> <td>0.35</td><td>0.24</td><td>0.20</td><td>0.17</td><td>0.15</td><td>0.13</td><td>0.10</td><td>0.10</td> <td></td> </tr> </table> | | 定格電圧(Vdc) Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | (20°C, 120Hz) | tanδ | 0.35 | 0.24 | 0.20 | 0.17 | 0.15 | 0.13 | 0.10 | 0.10 | | | | | | | | | | | |
| 定格電圧(Vdc) Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | | | |
| tanδ | 0.35 | 0.24 | 0.20 | 0.17 | 0.15 | 0.13 | 0.10 | 0.10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 耐 久 性 Endurance | 85°C中で1000時間定格電圧(リップル重畳)印加後、下記項目を満足すること。 After applying rated voltage with rated ripple current for 1000 hrs at 85°C, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>静電容量変化率 Capacitance Change</td> <td>初期値の±20%以内 Within ±20% of the initial value.</td> </tr> <tr> <td>損失角の正接 Dissipation Factor</td> <td>規格値の200%以下 Not more than 200% of the specified value.</td> </tr> <tr> <td>漏れ電流 Leakage Current</td> <td>規格値以下 Not more than the specified value.</td> </tr> </table> | | 静電容量変化率 Capacitance Change | 初期値の±20%以内 Within ±20% of the initial value. | 損失角の正接 Dissipation Factor | 規格値の200%以下 Not more than 200% of the specified value. | 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | | | | | | | | | | | | | | | | | | | | | | | | |
| 静電容量変化率 Capacitance Change | 初期値の±20%以内 Within ±20% of the initial value. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 損失角の正接 Dissipation Factor | 規格値の200%以下 Not more than 200% of the specified value. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 低温特性 Low Temperature Stability (インピーダンス比) Impedance Ratio(MAX) | <table border="1"> <tr> <td>定格電圧(Vdc) Rated Voltage</td> <td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>7</td><td>4</td><td>3</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>15</td><td>10</td><td>8</td><td>6</td><td>4</td><td>4</td><td>4</td><td>4</td> <td></td> </tr> </table> | | 定格電圧(Vdc) Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | (120Hz) | Z(-25°C)/Z(20°C) | 7 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | | Z(-40°C)/Z(20°C) | 15 | 10 | 8 | 6 | 4 | 4 | 4 | 4 | |
| 定格電圧(Vdc) Rated Voltage | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | (120Hz) | | | | | | | | | | | | | | | | | | | | | | | |
| Z(-25°C)/Z(20°C) | 7 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| Z(-40°C)/Z(20°C) | 15 | 10 | 8 | 6 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | |

◆リップル電流補正係数 / MULTIPLIER FOR RIPPLE CURRENT

周波数係数 Frequency coefficient

| 周波数(Hz) Frequency | 60(50) | 120 | 500 | 1k | 10k≤ |
|----------------------|--------|------|------|------|------|
| 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 |
| 100~470µF | 0.80 | 1.00 | 1.10 | 1.15 | 1.20 |

◆副記号 / OPTION

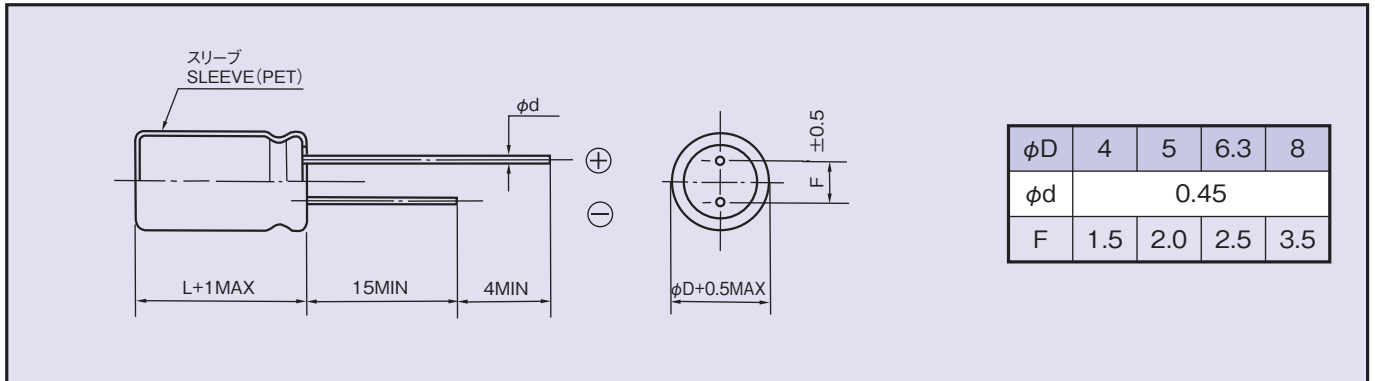
| | 記号 Code |
|--------------------|---------|
| PETスリーブ PET Sleeve | EFC |

◆呼称方法 / PART NUMBER

| | | | | | | |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| □□□ | MS7 | □□□□□ | M | □□□ | □□ | D×L |
| 定格電圧 Rated Voltage | シリーズ名 Series | 静電容量 Capacitance | 静電容量許容差 Capacitance Tolerance | 副記号 Option | リード加工記号 Lead Forming | ケースサイズ Case Size |

◆寸法図 / DIMENSIONS

(mm)



◆標準品一覧表 / STANDARD SIZE

Size $\phi D \times L$ (mm), Rated Ripple Current (mA r.m.s./85°C, 120Hz)

| 定格電圧 Vdc 静電容量 Cap (μF) | 4 | | 6.3 | | 10 | | 16 | |
|--|-------|--------|-------|--------|-------|--------|-------|--------|
| | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 10 | | | | | | | 4×7 | 28 |
| 22 | | | 4×7 | 34 | 4×7 | 38 | 4×7 | 42 |
| 33 | 4×7 | 33 | 4×7 | 42 | 4×7 | 46 | 5×7 | 62 |
| 47 | 4×7 | 39 | 4×7 | 50 | 5×7 | 66 | 5×7 | 73 |
| 100 | 5×7 | 65 | 5×7 | 87 | 6.3×7 | 99 | 6.3×7 | 110 |
| 220 | 6.3×7 | 110 | 6.3×7 | 133 | 8×7 | 165 | 8×7 | 145 |
| 330 | 8×7 | 165 | 8×7 | 180 | 8×7 | 210 | | |
| 470 | 8×7 | 190 | | | | | | |

| 定格電圧 Vdc 静電容量 Cap (μF) | 25 | | 35 | | 50 | | 63 | |
|--|-------|--------|-------|--------|-------|--------|-------|--------|
| | Size | Ripple | Size | Ripple | Size | Ripple | Size | Ripple |
| 1 | | | | | 4×7 | 12 | 4×7 | 12 |
| 2.2 | | | | | 4×7 | 16 | 4×7 | 16 |
| 3.3 | | | 4×7 | 18 | 4×7 | 19 | 5×7 | 24 |
| 4.7 | 4×7 | 21 | 4×7 | 22 | 4×7 | 24 | 6.3×7 | 33 |
| 10 | 4×7 | 31 | 5×7 | 32 | 5×7 | 42 | 6.3×7 | 45 |
| 22 | 5×7 | 55 | 6.3×7 | 60 | 6.3×7 | 64 | | |
| 33 | 6.3×7 | 66 | 6.3×7 | 73 | 8×7 | 75 | | |
| 47 | 6.3×7 | 80 | 8×7 | 95 | 8×7 | 85 | | |
| 100 | 8×7 | 115 | 8×7 | 115 | | | | |