

EMA Series

• 105°C 2,000Hrs assured.

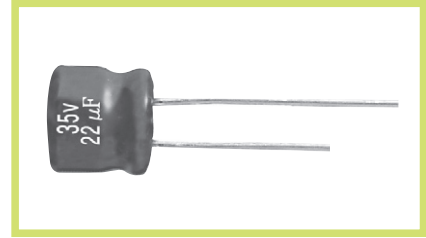
- Height 5mm.
- Wide Temperature range.
- Long Life.
- For CAR-Audio, Tuner.
- RoHS compliant.
- Halogen-free capacitors are also available.

Solvent-proof

ESA
(KRE)

Long Life

EMA



SPECIFICATIONS

| Item | Characteristics | | | | | | | | | | | | | | | | | | |
|---|---|---------------------------------|------|------|-------|------|-------|------------------|----|------------|------|------|------|------------------|------|------|------|---|---|
| Rated Voltage Range | 4 ~ 50 V _{DC} | | | | | | | | | | | | | | | | | | |
| Operating Temperature Range | -55 ~ +105°C | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20%(M) (at 20°C, 120Hz) | | | | | | | | | | | | | | | | | | |
| Leakage Current | I = 0.01CV(μA) or 3μA, whichever is greater. Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(V _{DC}) (at 20°C, 2 minutes) | | | | | | | | | | | | | | | | | | |
| Dissipation Factor(Tanδ) | <table border="1"> <tr> <td>Rated Voltage(V_{DC})</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.30</td> <td>0.27</td> <td>0.23</td> <td>0.19</td> <td>0.15</td> <td>0.13</td> <td>0.11</td> </tr> </table> <p>(at 20°C, 120Hz)</p> | Rated Voltage(V _{DC}) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | Tanδ(Max.) | 0.30 | 0.27 | 0.23 | 0.19 | 0.15 | 0.13 | 0.11 | | |
| Rated Voltage(V _{DC}) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | |
| Tanδ(Max.) | 0.30 | 0.27 | 0.23 | 0.19 | 0.15 | 0.13 | 0.11 | | | | | | | | | | | | |
| Temperature Characteristics (Max.Impedance ratio) | <table border="1"> <tr> <td>Rated Voltage(V_{DC})</td> <td>4</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25~50</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>6</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>12</td> <td>9</td> <td>7</td> <td>5</td> <td>3</td> </tr> </table> <p>(at 120Hz)</p> | Rated Voltage(V _{DC}) | 4 | 6.3 | 10 | 16 | 25~50 | Z(-25°C)/Z(20°C) | 6 | 3 | 3 | 2 | 2 | Z(-40°C)/Z(20°C) | 12 | 9 | 7 | 5 | 3 |
| Rated Voltage(V _{DC}) | 4 | 6.3 | 10 | 16 | 25~50 | | | | | | | | | | | | | | |
| Z(-25°C)/Z(20°C) | 6 | 3 | 3 | 2 | 2 | | | | | | | | | | | | | | |
| Z(-40°C)/Z(20°C) | 12 | 9 | 7 | 5 | 3 | | | | | | | | | | | | | | |
| Load Life | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 105°C. Capacitance change ≤ ±25% of the initial value Tanδ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value | | | | | | | | | | | | | | | | | | |
| Shelf Life | The following specifications shall be satisfied when the capacitors are restored to 20°C after the exposing them for 1,000 hours at 105°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30minutes, at least 24hours and not more than 48 hours before the measurements. Capacitance change ≤ ±25% of the initial value Tanδ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value | | | | | | | | | | | | | | | | | | |
| Others | Satisfied characteristics KS C IEC 60384-4 | | | | | | | | | | | | | | | | | | |

RATINGS OF EMA Series

| V _{DC} μF | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 |
|-----------------------|---------|--------|--------|--------|--------|--------|--------|
| 22 | | | | | | | 8X5 49 |
| 33 | | | | | | 8X5 55 | 8X5 60 |
| 47 | | | | | 8X5 60 | 8X5 66 | |
| 68 | | | | 8X5 66 | 8X5 73 | | |
| 100 | | | 8X5 71 | 8X5 80 | | | |
| 150 | | 8X5 77 | 8X5 87 | | | | |
| 220 | 8X5 105 | 8X5 94 | | | | | |

↑ Rated Ripple Current (mA rms/105°C, 120Hz)
↑ Case Size ØD×L(mm)

DIMENSIONS OF EMA Series

Unit(mm)

