

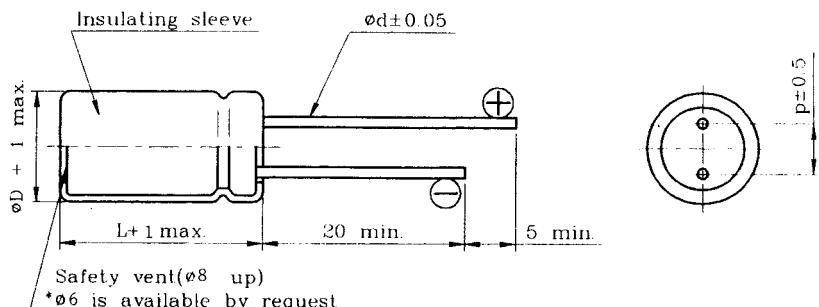
EMR SERIES

- Super miniature size.
- Designed for use in VTRs, car radios, Car stereos. Micro-cassette tape recorders, pocket calculators and watches.

Characteristics

| | | | | | | | | | |
|------------------------------|---|--------------------|---|------|------|------|------|------|------|
| Voltage Range | 4 ~ 63V | | | | | | | | |
| Capacitance Range | 0.47 ~ 470uF | | | | | | | | |
| Temperature Range | -40 ~ + 105°C | | | | | | | | |
| Capacitance Tolerance | +20% -20% (at 20°C, 120Hz) | | | | | | | | |
| Leakage Current | $I \leq 0.01CV$ or $3\mu A$, whichever is greater (After 2 minutes) | | | | | | | | |
| Dissipation Factor | Rated Voltage (V) | 4V | 6.3V | 10V | 16V | 25V | 35V | 50V | 63V |
| | Dissipation Factor($\tan \delta$)max | 0.35 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | 0.10 |
| | | (at 20°C, 120Hz) | | | | | | | |
| Stability at Low Temperature | Impedance ration at 120Hz | | | | | | | | |
| | Rated Voltage (V) | 4V | 6.3V | 10V | 16V | 25V | 35V | 50V | 63V |
| | Z-25°C/Z 20°C | 7 | 4 | 3 | 2 | 2 | 2 | 2 | 2 |
| | Z-40°C/Z 20°C | 15 | 8 | 6 | 4 | 4 | 3 | 3 | 3 |
| Load Life | After the rated voltage has been applied for 1000 hours at 105°C | Capacitance change | Within $\pm 20\%$ of initial value | | | | | | |
| | | D.F. $\tan \delta$ | 200% of less of initial specified value | | | | | | |
| | | Leakage current | Initial specified value of less | | | | | | |
| Shelf Life | After storage for 500 hours at 105°C, with no voltage applied and being stabilized at +20°C, Capacitor shall meet the limit specified in load life. | | | | | | | | |

Diagram of dimensions



| | | | | |
|----------|------|-----|-----|-----|
| D ϕ | 4 | 5 | 6 | 8 |
| p | 1.5 | 2.0 | 2.5 | 3.5 |
| d ϕ | 0.45 | | 0.5 | |

Maximum Ripple Current mA rms 105°C 120Hz Case Size of Standard Products DxL(mm)

| wv uF | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 |
|----------|-----|-----|-----|----|----|----|----|----|
| 0.47 | → | → | → | → | → | → | 5 | 6 |
| 1 | → | → | → | → | → | → | 10 | 13 |
| 2.2 | → | → | → | → | → | → | 19 | 21 |
| 3.3 | → | → | → | → | → | → | 24 | 26 |
| 4.7 | → | → | → | → | 15 | 20 | 29 | 33 |
| 10 | → | → | → | 30 | 30 | 30 | 32 | 35 |
| 22 | → | → | 35 | 37 | 45 | 47 | 50 | |
| 33 | → | → | 40 | 42 | 47 | 52 | 62 | |
| 47 | 35 | 40 | 47 | 65 | 65 | 70 | | |
| 100 | 40 | 65 | 90 | 92 | 95 | | | |
| 220 | 65 | 120 | 125 | | | | | |
| 330 | 120 | 150 | | | | | | |
| 470 | 150 | | | | | | | |

| wv uF | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 |
|----------|------|------|------|------|------|-----|------|-----|
| 0.47 | → | → | → | → | → | → | 4x7 | 4x7 |
| 1 | → | → | → | → | → | → | 4x7 | 4x7 |
| 2.2 | → | → | → | → | → | → | 4x7 | 4x7 |
| 3.3 | → | → | → | → | → | → | 4x7 | 4x7 |
| 4.7 | → | → | → | → | → | 4x7 | 4x7 | 4x7 |
| 10 | → | → | → | 4x7 | 4x7 | 4x7 | 5x7 | 6x7 |
| 22 | → | → | 4x7 | 4x7 | 5x7 | 5x7 | 6x7 | |
| 33 | → | → | 4x7 | 4x7 | 5x7 | 6x7 | *8x9 | |
| 47 | 4x7 | 4x7 | 4x7 | 5x7 | 6x7 | 6x7 | | |
| 100 | 4x7 | 5x7 | 5x7 | 6x7 | *8x9 | | | |
| 220 | 6x7 | 6x7 | 6x7 | *8x9 | | | | |
| 330 | 6x7 | *8x9 | *8x9 | | | | | |
| 470 | *8x9 | | | | | | | |

* Also 8x7 is available