



MG SERIES

Miniature Size Height 7mm 85°C 1000HR 小型品 85°C

Features

- The MR series is employing etched foils for higher gain effect.
- Designed for use in VTRs, car radios, car stereos, micro-cassette tape recorders, pocket calculators and watches.

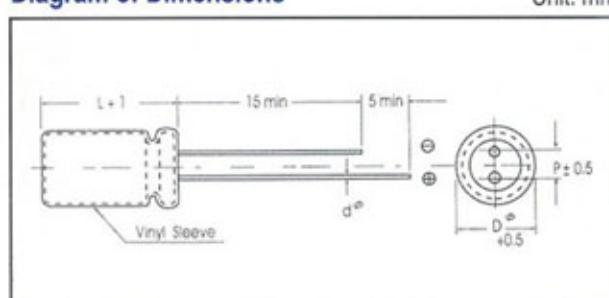
Specifications

| Items | Performance Characteristics | | | | | | | | | | | |
|--|---|------|------|------|---|------|------|------|------|--|--|--|
| Operating Temperature Range | -40 to +85°C | | | | | | | | | | | |
| Rated Working Voltage Range | 6.3 to 63V DC | | | | | | | | | | | |
| Nominal Capacitance Range | 0.1 to 470 μ F | | | | | | | | | | | |
| Capacitance Tolerance | $\pm 20\%$ (120Hz, +20°C) | | | | | | | | | | | |
| Leakage Current | 1 \leq 0.01CV or 3(μ A) | | | | whichever is greater measured after 3 minutes application of rated working voltage at +20°C | | | | | | | |
| Dissipation Factor ($\tan \delta$) (120Hz, +20°C) | Working voltage (v) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | | | |
| | $\tan \delta$ (max) | 0.35 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | 0.08 | | | |
| Characteristics at Low Temperature | Impedance ratio max. at 120Hz | | | | | | | | | | | |
| | Working voltage (v) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | | | |
| | -25°C/+20°C | 6 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | | | |
| | -40°C/+20°C | 12 | 8 | 6 | 4 | 4 | 3 | 3 | 3 | | | |
| High Temperature Loading | Test conditions Duration : 1000 hours Ambient temperature : +85°C Applied Voltage : Rated DC working voltage | | | | | | | | | | | |
| | Post test requirements at +20°C Leakage current : \leq initial specified value Capacitance change : $\leq +20\%$ of initial measured value (4V: $\leq +30\%$) $\tan \delta$: $\leq 150\%$ of initial specified value | | | | | | | | | | | |
| | Test conditions Duration : 500 hour Ambient temperature : +85°C Applied voltage : (None) | | | | Post test eqoirements at +20°C Same limits for high temperature loading. | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | Satisfies characteristic W of JIS C 5141-1982 | | | | | | | | | | | |

Case Size Table

| μ F WV (SV) | 6.3 (8) | 10 (13) | 16 (20) | 25 (32) | 35 (44) | 50 (63) | 63 (79) | $\phi D \times L$ (mm) |
|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------------------|
| 0.1 | | | | | | 4×7 | 4×7 | |
| 0.22 | | | | | | 4×7 | 4×7 | |
| 0.33 | | | | | | 4×7 | 4×7 | |
| 0.47 | | | | | | 4×7 | 4×7 | |
| 1.0 | | | | | | 4×7 | 4×7 | |
| 2.2 | | | | | | 4×7 | 4×7 | |
| 3.3 | | | | | | 4×7 | 4×7 | |
| 4.7 | | | | 4×7 | 4×7 | 4×7 | 5×7 | |
| 10 | | | 4×7 | 4×7 | 5×7 | 5×7 | 6.3×7 | |
| 22 | | | 4×7 | 5×7 | 5×7 | 6×7 | | |
| 33 | | 4×7 | 5×7 | 6×7 | 6.3×7 | 8×7(8×9) | | |
| 47 | 4×7 | 4×7 | 5×7 | 6×7 | 6.3×7 | 8×7(8×9) | | |
| 100 | 5×7 | 5×7 | 6×7 | 8×9 | 8×7(8×9) | | | |
| 220 | 6×7 | 6×7 | 8×9 | | | | | |
| 330 | 8×7(8×9) | 8×7(8×9) | 8×7(8×9) | | | | | |
| 470 | 8×9 | 8×9 | 8×9 | | | | | |

Diagram of Dimensions



| D ϕ | 4 | 5 | 6.3 | 8 |
|----------|---------------|---------------|---------------|---------------|
| P | 1.5 ± 0.5 | 2.0 ± 0.5 | 2.5 ± 0.5 | 3.5 ± 0.5 |
| d ϕ | 0.45 | 0.45 | 0.45 | 0.50 |