

INTRODUCTION

MF series is a group of metal film resistors applying high Aluminum content base material vacuum sputtered by Ni-Cr alloy and excellent heat-and wet-proof special resin for protective coating. Those resistors are manufactured through integrated automatic production system and then have good stable and uniform property. Furthermore, they show excellent performance regardless open in air.

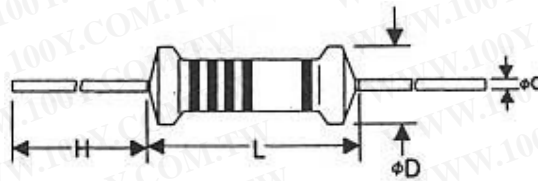
於真空中以濺射方式在瓷棒上均勻的鍍上一層特殊金屬膜，另瓷棒兩端再加鍍貴金屬以確保低雜音，低溫度係數。溫度係數有 $\pm 200\text{ppm} \sim \pm 10\text{ppm}$ ，阻值容許誤差值有 $\pm 5\% \sim \pm 0.1\%$ ，特別精密者可承製 $\pm 0.1\%$ 以下，廣泛應用於高級音響、電算機、電腦、測試儀器、儀表、自動控制、國防及太空設備等。

FEATURES

- High stability.
- Low noise, Low temperature coefficient.
- Precision characteristics.
- Variety of packaging-bulk, and taped, cut and formed supplied.

特性

- 高安定性。
- 低雜音，低溫度係數。
- 精密特性。
- 有各式包裝-散裝、帶狀，並供應各種成型，剪腳。



SPECIFICATION

DIMENSION

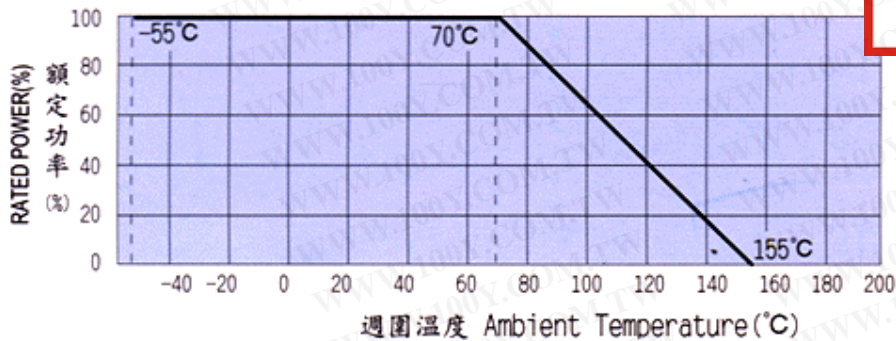
| TYPE | | MAXIMUM WORKING VOLTAGE | MAXIMUM OVERLOAD VOLTAGE | RESISTANCE RANGE | | TYPE | | DIMENSION(mm) | | | |
|------|------|-------------------------|--------------------------|------------------|----------------|------|------|---------------|-------------|-----------|--------------|
| MF | MFS | | | $\pm 1\%(F)$ | $\pm 0.5\%(D)$ | MF | MFS | L ± 1 | D ± 0.5 | H ± 3 | d ± 0.05 |
| 1/8W | --- | 200V | 400V | 10R~1M | 10R~1M | 1/8W | 1/4W | 3.5 | 1.8 | 28 | 0.45 |
| 1/4W | 1/4W | 250V | 500V | 10R~1M | 10R~1M | 1/4W | 1/2W | 6.3 | 2.4 | 28 | 0.56 |
| 1/2W | 1/2W | 350V | 700V | 10R~1M | 10R~1M | 1/2W | 1W | 9.0 | 3.2 | 30 | 0.6 |
| 1W | 1W | 400V | 800V | 10R~1M | 10R~1M | 1W | 2W | 11 | 4.5 | 30 | 0.8 |
| 2W | 2W | 500V | 1000V | 10R~1M | 10R~1M | 2W | 3W | 15 | 5.0 | 30 | 0.8 |

※Special type on request (EX : Flame Proof Type & Low ppm)

CHARACTERISTICS

| CHARACTERISTIC | SPECIFICATION | TEST METHOD |
|------------------------------|--|------------------------|
| DC RESISTANCE | Within specified tolerance | MIL-STD-202 Method 303 |
| TEMPERATURE COEFFICIENT | As buyer requested $\pm 10\text{ppm}/^\circ\text{C} \pm 50\text{ppm}/^\circ\text{C}$ $\pm 10\text{ppm}/^\circ\text{C} \pm 50\text{ppm}/^\circ\text{C}$ | MIL-STD-202 Method 304 |
| DIELECTRIC STRENGTH | No flashover or damage | MIL-STD-202 Method 301 |
| INSULATION RESISTANCE | At least 1,000M Ω | MIL-STD-202 Method 302 |
| CURRENT NOISE TEST | below 10K Ω below 0.05 μ V/V 10K Ω ~below 0.1 μ V/V below 1M7 below 0.2 μ V/V | MIL-STD-202 Method 308 |
| VIBRATION | ΔR with in $\pm(0.25\%+0.05\Omega)$ | MIL-STD-202 Method 201 |
| TERMINAL STRENGTH | Lead is not break or loose | MIL-STD-202 Method 211 |
| RESISTANCE TO SOLDERING HEAT | ΔR with in $\pm(0.25\%+0.05\Omega)$ | MIL-STD-202 Method 210 |
| SOLDERABILITY | At least 95% coverage | MIL-STD-202 Method 208 |
| THERMAL SHOCK | ΔR with in $\pm(0.5\%+0.05\Omega)$ | MIL-STD-202 Method 107 |
| SHORT TIME OVERLOAD | ΔR with in $\pm(0.05\%+0.05\Omega)$ | MIL-R-10509 |
| HUMIDITY | ΔR with in $\pm(1\%+0.05\Omega)$ No mechanical damage | MIL-STD-202 Method 103 |
| LOW TEMPERATURE OPERATION | ΔR with in $\pm(0.5\%+0.05\Omega)$ | MIL-R-10509 |
| LOAD LIFE | ΔR with in $\pm(1\%+0.05\Omega)$ | MIL-STD-202 Method 108 |
| RESISTANCE TO SOLVENT | Color bands legible No mechanical damage | MIL-STD-202 Method 215 |

DERATING CURVE



勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

ORDERING INFORMATION

| <u>MF</u> | <u>08</u> | <u>10K0</u> | <u>F</u> | <u>I</u> |
|---------------------------------------|---|--|--|---|
| Series : Metal Film Resistor | Wattage : MF08=1/8W MF04=1/4W MF02=1/2W MF1W=1W | Value : 0E50=0.5R 2E30=2.3R 12K1=12.1K 1M00=1M | Tolerance : F=1% D=0.5% C=0.25% B=0.1% | Packing : T=Tapping B=Bulk M=Forming |