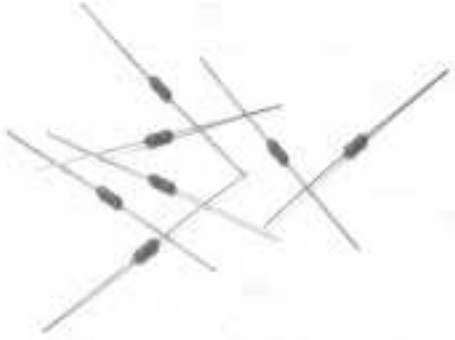


Carbon Film Resistors

JARO COMPONENTS, INC. LEADED RESISTORS



PROFESSIONAL & FLAME-PROOF TYPE

Miniature Style [MF Series]

FEATURES

Excellent Long-Term Stability

Miniature in Size

Coating and Marking Resist Trichlorethylene, Freon, and Other Cleaning Agents

Resistance Tolerance: $\pm 5\%$

Resistance Range: 1Ω - $10M\Omega$

INTRODUCTION

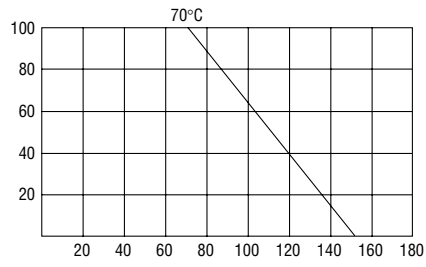
The MF Series are manufactured by Coating a homogeneous film of pure carbon on high grade ceramic rods, resistance less than 10Ω have an electroless-deposited nickel film.

The 600MF resistors are coated with layers of green color flame-proof lacquer.

The 600MF resistors meet overload test in accordance with UL specification #1412 without producing a fire hazard.

DERATING CURVE

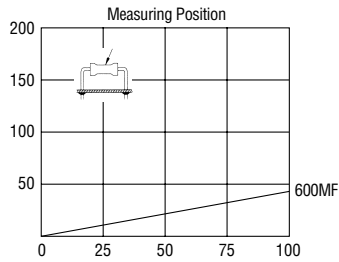
Rated Load (%)



Ambient Temperature (°C)

HOT-SPOT TEMPERATURE

Surface Temp. Rise (°C)



Applied Load, % of RCWV

DIMENSIONS

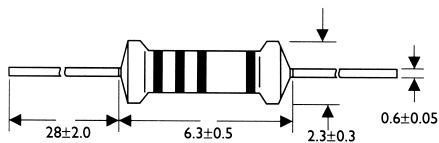


FIG. 1 TEMPERATURE COEFFICIENT

| STYLE | Max. Value of Temp. Coefficient ppm/°C | | |
|-------|--|----------------------------|---------------------|
| | under $100K\Omega$ | $100K$ to $1M\Omega$ excl. | $1M\Omega$ and over |
| 600MF | +350 -500 | +350 -700 | +350 -1000 |

MF Series

ELECTRICAL CHARACTERISTICS

| STYLE | 600MF |
|-----------------------------------|-----------------|
| Power Rating at 70°C | 0.6W |
| Operating Temp. Range | -55°C to +155°C |
| Maximum Working Voltage | 300V |
| Maximum Overload Voltage | 600V |
| Dielectric Withstanding Voltage | 500V |
| Value Range ±5% | 1Ω-10MΩ |
| Temperature Coefficient (by Type) | see FIG. 1 |

* Standard resistance is 1Ω-10MΩ, below or over this resistance on request.

ENVIRONMENTAL CHARACTERISTICS

| PERFORMANCE TEST | TEST METHOD | TEST METHOD | APPRAISE |
|---------------------------------------|--|--|---|
| Short Time Overload | JIS-C-5202 5.5 | 2.5 Times RCWV for 5 Seconds | ±(0.75%+0.05Ω) |
| Dielectric Withstanding Voltage | JIS-C-5202 5.7 | in V-Block for 60 Seconds | 500V |
| Temperature Coefficient of Resistance | JIS-C-5202 5.2 | -55°C to +155°C | by Type |
| Insulation Resistance | JIS-C-5202 5.6 | in V-Block | >1000MΩ |
| Solderability | JIS-C-5202 6.5 | 235°C for 5±0.5 Seconds | 95% Min. Coverage |
| Resistance to Solvent | JIS-C-5202 6.9 | Trichroethane for 1 Min. with Ultrasonic | No Deterioration of Coatings and Markings |
| Terminal Strength | Direct load for 10 Sec. in The Direction of The Terminal Leads | | ≥2.5kg (24.5N) |
| Pulse Overload | JIS-C-5202 5.8 | 4 Times RCWV 10000 Cycles (1 Sec. on , 25 Sec. off) | ±(1%+0.05Ω) |
| Load Life in Humidity | JIS-C-5202 7.9 | 40±2°C, 90-95% RH at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off) | ±(3%+0.05Ω) |
| Load Life | JIS-C-5202 7.10 | 70°C at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off) | ±(3%+0.05Ω) |
| Temperature Cycling | JIS-C-5202 7.4 | -65°C·Room Temp.·150°C·Room Temp. for 5 Cycles | ±(1%+0.05Ω) |
| Resistance to Soldering Heat | JIS-C-5202 6.4 | 350°C±10°C for 3±0.5 Seconds | ±(1%+0.05Ω) |

* Rated Continuous Working Voltage (RCWV)=√Power Rating x Resistance Value