

PRECISION FIXED METAL FILM RESISTORS

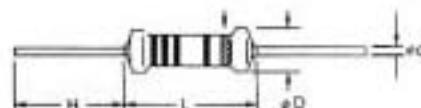
High Stability

KOME

POWER RATING: 1/6W, 1/4W, 1/2W, 1W, 2W

TOLERANCE: 0.1%, 0.25%, 0.5%, 1%, 5%

TEMPERATURE COEFFICIENT: $\pm 15\text{ppm}$, $\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$



HOW TO ORDER

| KMF | 25 | J | 2 | 100 | BP |
|---------------------------------|---|--|---|---|--|
| Product Code | Type | Tolerance | | Value | Packaging |
| Fix. Value Metal resistor | 12 1/6W 25 1/4W 50 1/2W 100 1W 200 2W 500 5W 1000 10W | F $\pm 1\%$ J $\pm 5\%$ K $\pm 10\%$ | Total Cl. No. of Total Character (100-100-2) | E-24 : Significant figs + number of zeros E-96 : No. of character + Significant figs + number of Zeros Example E-24 1R0 = 1 Ω , 103 = 10K Ω E-96 5 1002 = 10K Ω E-96 5 1003 = 100K Ω Letter R is decimal point Jumper is expressed by 000 | BP Bulk packaging AP Ammo packaging |

DIMENSIONS

| TYPE | Dimension (mm) | | | |
|---------|----------------|---------------|------------------------------|-----------------|
| | L | D | H | d |
| MF-1/6W | 3.8 \pm 0.3 | 2.1 \pm 0.2 | 28 \pm 3.0 | 0.48 \pm 0.03 |
| MF-1/4W | 4.4 \pm 0.5 | 2.5 \pm 0.3 | 28 \pm 3.0 28 \pm 3.0 | 0.60 \pm 0.03 |
| MF-1/2W | 10 \pm 0.5 | 4.0 \pm 0.5 | 28 \pm 3.0 | 0.60 \pm 0.03 |
| MF-1W | 13 \pm 1.0 | 5.0 \pm 0.5 | 28 \pm 3.0 28 \pm 3.0 | 0.65 \pm 0.03 |
| MF-2W | 16 \pm 1.0 | 6.0 \pm 0.5 | 28 \pm 3.0 | 0.70 \pm 0.03 |

GENERAL SPECIFICATION

| TYPE | Mil Style | Power Rating | | Max Working Voltage | | Max Overload Voltage | |
|---------|--------------|--------------|--------|------------------------|-------|-------------------------|-------|
| | | 70°C | 125°C | 70°C | 125°C | 70°C | 125°C |
| MF-1/6W | RNF-50 | 0.166W | 0.05W | 200 | 150 | 400 | 300 |
| MF-1/4W | RNF-55 | 0.25W | 0.1W | 250 | 200 | 500 | 400 |
| MF-1/2W | RNF-60 | 0.5W | 0.125W | 350 | 250 | 700 | 500 |
| MF-1W | RNF-65 | 1W | 0.25W | 500 | 300 | 1000 | 600 |
| MF-2W | RNF-70 | 2W | 0.5W | 500 | 350 | 1000 | 700 |

CHARACTERISTICS AND COMPARISON

| Requirements | | MF Series % Change in Resistance (ΔR) | | | | | Mil-R-22684 Style R.L Requirement | Mil-R-10509 Chart C, E Requirement |
|--------------------------------------|-----|---|--------------------|--------------------|--------------------|--------------------|---|--|
| | | MF-1/6W | MF-1/4W | MF-1/2W | MF-1W | MF-2W | | |
| Temperature Cycling -65°C to +150°C | (%) | ± 0.25 | ± 0.25 | ± 0.25 | ± 0.25 | ± 0.25 | ≤ 1.00 | ≤ 0.25 |
| Low Temperature Operation -65°C | (%) | ± 0.25 | ± 0.25 | ± 0.25 | ± 0.25 | ± 0.25 | ≤ 0.50 | ≤ 0.25 |
| Short Time Overload | (%) | ± 0.25 | ± 0.20 | ± 0.20 | ± 0.25 | ± 0.20 | ≤ 0.50 | ≤ 0.25 |
| Terminal Strength, 5lb. Pull | (%) | ± 0.20 | ± 0.20 | ± 0.20 | ± 0.15 | ± 0.15 | ≤ 0.50 | ≤ 0.20 |
| Resistance to Soldering Heat +350°C | (%) | ± 0.10 | ± 0.10 | ± 0.10 | ± 0.10 | ± 0.10 | ≤ 0.50 | ≤ 0.10 |
| Moisture Resistance, Mil Std. 202 | (%) | ± 0.50 | ± 0.50 | ± 0.50 | ± 0.50 | ± 0.50 | ≤ 1.50 | ≤ 0.50 |
| Life 1000 Hours (Rated Power) | (%) | ± 0.50 | ± 0.50 | ± 0.50 | ± 0.50 | ± 0.50 | ≤ 2.00 | ≤ 0.50 |
| Vibration - High frequency 10-2000Hz | (%) | ± 0.25 | ± 0.20 | ± 0.20 | ± 0.20 | ± 0.20 | ≤ 0.50 | ≤ 0.25 |
| Insulation Resistance | | $\geq 10^8 \Omega$ | $\geq 10^8 \Omega$ | $\geq 10^8 \Omega$ | $\geq 10^8 \Omega$ | $\geq 10^8 \Omega$ | $\geq 10^8 \Omega$ | $\geq 10^8 \Omega$ |

RESISTANCE RANGE

| Type | Tolerance | TC+15ppm / -20ppm | TC+50ppm | Remark |
|---------|--------------|-------------------------------|-------------------------------|---|
| MF-1/6W | $\pm 1\%$ | 100 Ω - 100K Ω | 1 Ω - 10M Ω | *Standard resistance is 10 Ω - 1M Ω Below or over this Resistance on Request |
| | $\pm 0.5\%$ | 100 Ω - 100K Ω | 51.1 Ω - 200K Ω | |
| | $\pm 0.25\%$ | 100 Ω - 100K Ω | 51.1 Ω - 200K Ω | |
| | $\pm 0.1\%$ | 100 Ω - 100K Ω | 51.1 Ω - 200K Ω | |
| MF-1/4W | $\pm 1\%$ | 51.1 Ω - 511K Ω | 1 Ω - 10M Ω | |
| | $\pm 0.5\%$ | 51.1 Ω - 511K Ω | 10 Ω - 1M Ω | |
| | $\pm 0.25\%$ | 100 Ω - 330K Ω | 51.1 Ω - 330K Ω | |
| | $\pm 0.1\%$ | 100 Ω - 100K Ω | 51.1 Ω - 330K Ω | |
| MF-1/2W | $\pm 1\%$ | 51.1 Ω - 1M Ω | 1 Ω - 10M Ω | |
| | $\pm 0.5\%$ | 51.1 Ω - 1M Ω | 10 Ω - 1M Ω | |
| | $\pm 0.25\%$ | 100 Ω - 511K Ω | 51.1 Ω - 511K Ω | |
| | $\pm 0.1\%$ | 100 Ω - 330K Ω | 51.1 Ω - 511K Ω | |
| MF-1W | $\pm 1\%$ | 51.1 Ω - 1M Ω | 1 Ω - 10M Ω | |
| | $\pm 0.5\%$ | 51.1 Ω - 1M Ω | 10 Ω - 1M Ω | |
| | $\pm 0.25\%$ | 100 Ω - 511K Ω | 51.1 Ω - 511K Ω | |
| | $\pm 0.1\%$ | 100 Ω - 330K Ω | 51.1 Ω - 511K Ω | |
| MF-2W | $\pm 1\%$ | 51.1 Ω - 1M Ω | 1 Ω - 10M Ω | |
| | $\pm 0.5\%$ | 51.1 Ω - 1M Ω | 10 Ω - 1M Ω | |
| | $\pm 0.25\%$ | 100 Ω - 511K Ω | 51.1 Ω - 511K Ω | |
| | $\pm 0.1\%$ | 100 Ω - 330K Ω | 51.1 Ω - 511K Ω | |

REMARKS:

Special lead length (H) on request.
Flameproof type also available

Special resistance, temperature coefficient and tolerance on request
Miniature type also available for 1/4W and 1/2W. Type 1/4WS and 1/2WS