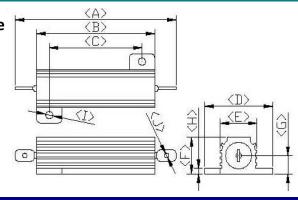
METAL-CLAD WIRE WOUND RESISTORS

GMR SERIES

• Compact Light Weight Electric Power Type



General Specification

| Power Rating | Dimensions (mm) | | | | | | | | | |
|---------------------|-----------------|-------|-------|-------|------|------|-------|---------|---------|---------|
| (W) | A ± 1 | B ± 1 | C ± 1 | D ± 1 | E±1 | F±1 | G ± 1 | H ± 0.5 | I ± 0.3 | J ± 0.2 |
| GMR-5W | 25 | 15 | 10 | 16.5 | 8.5 | 8 | 4 | 2 | 2 | 2 |
| GMR-10W | 32 | 19 | 14 | 20 | 10.5 | 10 | 5 | 2 | 2 | 2 |
| GMR-25W | 47 | 28 | 18 | 27 | 14 | 15 | 7 | 2.2 | 3.2 | 2 |
| GMR-50W | 70 | 50 | 39 | 29 | 16 | 15.5 | 7 | 2.2 | 3.2 | 2 |
| GMR-80W | 96 | 66 | 35 | 47 | 27 | 28 | 13 | 5 | 5 | 2 |
| GMR-100WS | 96 | 66 | 35 | 47 | 27 | 28 | 13 | 5 | 5 | 2 |
| GMR-100W | 140 | 89 | 68 | 70 | 46 | 44.5 | 19 | 5 | 5 | 2 |
| GMR-250W | 160 | 113 | 93 | 84 | 53 | 55.5 | 25 | 5 | 5 | 2 |

Option: 1. Straight Leads on each End 0.8 or 1.0mm Diameter

2. Screws Mounting With Nuts And Washers On each end 80W-100WS-4x15mm, 100W-5x25mm, 250W-5x23mm

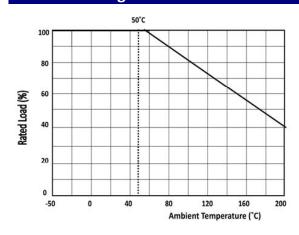
Electrical Specification

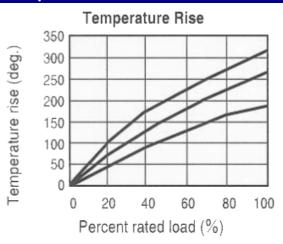
| Characteristics | Limits | Test methods | | |
|---------------------------------|---|-----------------|--|--|
| Resistance toelrance | Resistance tolerance ± 5% (J) ± 10%(K) | JIS-C-5202 5-1 | | |
| Temperature coefficient | ± 200ppm/°C max. | JIS-C-5202 5-2b | | |
| Power rating load | \triangle R/R \leq ± (1% + 0.05 Ω) Surface temp. rise 350°C max. | JIS-C-5202 5-4 | | |
| Short-time overload | \triangle R/R \leq ± (2% + 0.05 Ω) 100% rated power 5 seconds | JIS-C-5202 5-5 | | |
| Insulation resistance | DC500V 100M Ω min | JIS-C-5202 5-6 | | |
| Dielectric withstanding voltage | AC3000V 60 Sec. | JIS-C-5202 5-7 | | |



Power Derating Curve

Temperature Rise





Short-time Overload Rating

| Load Time (second) | 1 | 2 | 3 | 4 | 5 | 10 | 30 | 60 | 180 | 300 | 600 | 900 |
|--------------------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|
| Power Increase(%) | 2600 | 2000 | 1600 | 1400 | 1300 | 1000 | 600 | 450 | 200 | 150 | 120 | 110 |

Parts Number System

| GMR - | 50W | 100 | J |
|------------------------------------|----------|---------------------|-----------|
| Туре | Wattages | Resistance | Tolerance |
| Golden Color | | 3 digit code for 5% | J = ±5% |
| Metal Clad Wire Wound Resistors | | 4 digit code for 1% | F= ±1% |
| | | | |

