



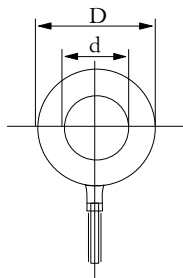
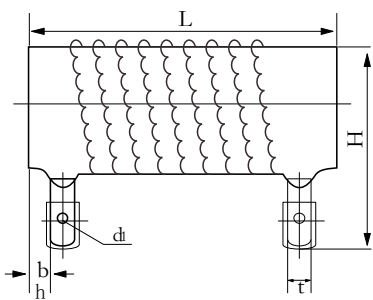
Features

- I Wide power range
- II Excellent high temperature load performance
- III Full-welded structure
- IV High reliability
- V Imported grey and green coating, character marking assembly and fittings(available)

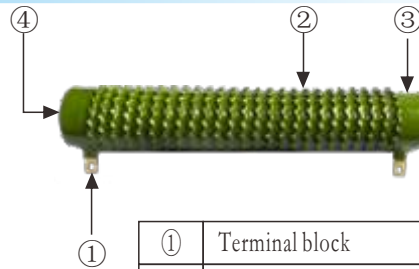
Applications

- I Mostly used in large power supply
- II Electricity equipment
- III Electrical equipment
- IV Locomotive

Dimensions



Composition



| | |
|---|-------------------------------|
| ① | Terminal block |
| ② | Alloy wire |
| ③ | Glaze layer |
| ④ | 85%High Aluminum Ceramic tube |

| Type | Dimensions(mm) | | | | | |
|-----------|----------------|-------|-------|-------|-------|--------|
| | L±2.0 | D±1.0 | d±1.0 | H±0.5 | h±1.0 | d1±0.5 |
| KGU 50W | 101.6 | 14 | 8.5 | 8 | 14 | 4.5 |
| KGU 100W | 165 | 20 | 13 | 8 | 16 | 4.5 |
| KGU 150W | 165 | 29 | 19 | 9.5 | 16 | 5 |
| KGU 300W | 216 | 29 | 19 | 9.5 | 16 | 5 |
| KGU 400W | 198 | 32 | 19 | 9.5 | 16 | 5 |
| KGU 500W | 216 | 34 | 19 | 9.5 | 16 | 5 |
| KGU 450W | 267 | 29 | 19 | 9.5 | 16 | 5 |
| KGU 600W | 216 | 40 | 28 | 9.5 | 18 | 5 |
| KGU 1000W | 300 | 62 | 45 | 15 | 30 | 6 |
| KGU 2000W | 510 | 62 | 45 | 15 | 30 | 6 |
| KGU 3000W | 400 | 100 | 80 | 20 | 40 | 8 |

Ordering Information

Example:

| | | | | |
|-------------|--------------|----------------------|------------|----------|
| KGU | 0.5 | G | 100R | 25ppm/°C |
| (1) | (2) | (3) | (4) | (5) |
| Series Name | Power Rating | Resistance Tolerance | Resistance | T.C.R |

(1)Type: KGU SERIES

(2)Power Rating: 50W,100W,150W,300W,400W,500W,450W,600W,1000W,2000W,3000W

(3)Tolerance: G=±2%,J=±5%

(4)Resistance Value:100R=100Ω

(5)T.C.R:±250ppm/°C

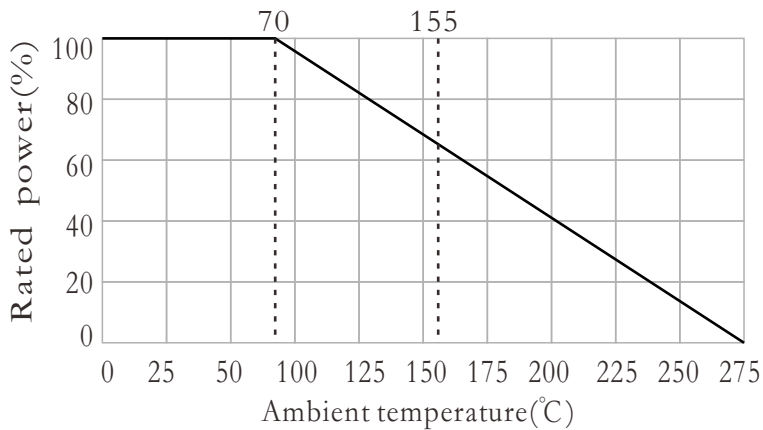
Reference Standards

JISC 5201-1

Technical Specification

| Type | Rated Power (W) | TCR (ppm/°C) | Resistance Range J ± 5% | Rating Ambient Temp | Operating Temp Range | Maximum working voltage |
|----------|-----------------|--------------|-------------------------|---------------------|----------------------|-------------------------|
| KGU50W | 50W | ± 250 | 0.5R-50R | 70°C | -55°C+155°C | $\sqrt{P \cdot R}$ |
| KGU100W | 100W | | 0.5R-50R | | | |
| KGU150W | 150W | | 0.5R-50R | | | |
| KGU200W | 300W | | 0.5R-200R | | | |
| KGU300W | 400W | | 1R-200R | | | |
| KGU350W | 500W | | 1R-200R | | | |
| KGU400W | 450W | | 1R-200R | | | |
| KGU500W | 600W | | 2R-200R | | | |
| KGU1000W | 1000W | | 3R-200R | | | |
| KGU2000W | 2000W | | 5R-200R | | | |
| KGU3000W | 3000W | | 5R-200R | | | |

Derating Curve



Performance

| Test Items | Specifications | Test Methods(JIS C 5201-1) |
|--------------------------|---|---|
| Short time over load | $\Delta R \leq \pm (1\%R + 0.05\Omega)$ | $\sqrt{10P \cdot R}$ |
| Leaching | $\Delta R \leq \pm (1\%R + 0.05\Omega)$ | $350 \pm 10^\circ\text{C}$ $3.5 \pm 0.5\text{S}$ |
| Endurance | $\Delta R \leq \pm (5\%R + 0.1\Omega)$ | $15^\circ\text{C} \sim 35^\circ\text{C}$, $\sqrt{10P \cdot R}$, 1000H |
| Vibration | $\Delta R \leq \pm (5\%R + 0.1\Omega)$ | 10Hz~50Hz, 2H |
| Surface temperature rise | $\Delta R \leq 250^\circ\text{C}$ | $\sqrt{P \cdot R}$ |