HIGH-MEG OHM RESISTORS
ZERO OHM & JUMPER WIRE

HIGH-MEG OHM RESISTOR

INTRODUCTION

The HMG resistors are suited for high voltage and high impedance applications where resistance and stability are required.

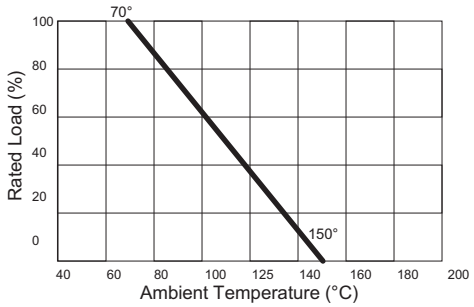
Consistent Quality and reliability is achieved by thick film construction on high-grade ceramic core. Multilayer epoxy coating offers exceptional protection.

HMG resistors are particularly suited for voltage dividers, X-ray equipment, and high voltage power supplies.

FEATURES

- Low cost, High stability, accuracy, and reliability
- Standard tolerances: ±2% & ±5%
- Standard TCR ±350 ppm (200 ppm available)
- Standard resistance to 100 meg ohm.

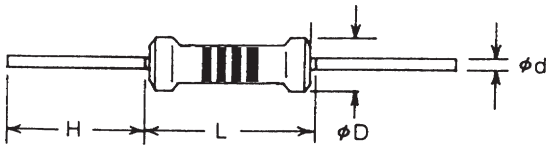
DERATING CURVE



PART NUMBER EXAMPLE

HMG 100 R - 33M - J

SPECIFICATIONS



MIN

Type	Dimension (mm)				Power Rating	Maximum Working Voltage	Maximum Overload Voltage	Resistance Range	
	L	D	H	d±.05				±2%(G)	±5%(J)
HMG25	6.5±0.5	2.3±0.3	20	0.60	1/4W	250	500	11M-22M	11M-100M
HMG50	9.5±0.5	3.2±0.3	20	0.60	1/2W	500	1000	11M-22M	11M-100M
HMG100	12.0±1.0	4.5±0.5	26	0.80	1W	750	1500	11M-100M	11M-100M
HMG200	16.0±1.0	5.0±0.5	26	0.80	2W	1000	2000	11M-100M	11M-100M

PERFORMANCE(MAXDR)

Temperature Cycling	±0.5%
Load Life 1000 Hours	±2.0%
Shelf Life at 25°C	±1.0%(12 months)
Effect of Soldering	±1.0%
Moisture Resistance	±2.0%
Short-Time Overload	±1.0%

ZERO OHM & JUMPER WIRE

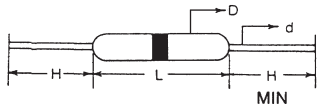
SPECIFICATIONS (sizes in mm)

Construction	Part Number	L	D	H	d
Jumper Wire	ZR25*-0R0-W	61.5±1			0.6±0.05
Ceramic	ZR25*-0R0-C	6.5±.3	2.5±.2	20	0.6±0.05
Ceramic	ZR12*-0R0-C	3.8±.5	1.5±.2	20	0.45±0.05

* "R" for Tape & Reel, "A" for Tape & Ammo, "B" for Bulk Pack.

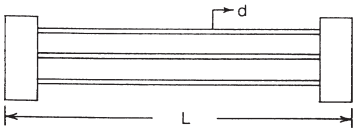
Test	Test Method	Limits
Resistance		0.01 ohm max.
Operating Temperature		-55°C to +155°C
Max Current		25 amps @ +25°C (ZR25)
Max Working Voltage		300 Vdc
Max Overload Voltage		600 Vdc
Temperature Coefficient		(PPM/°C) 0 to -100 PPM
Short Time Overload	Apply 2.5 times the rated voltage for 5sec.	No visible damage
Load	1000 hrs. at 70°C a direct voltage applied, cycles of 1.5 hrs. on and .5 hrs. off throughout test.	DR=0.5%
Temperature Cycling	5 cycles of 30 min. duration at the extremes of temp. range, max. and min., measurements of ohmic value 4 hrs. after completion of test.	DR=0.5%
Dielectric Strength	Using a 90° "V" shaped conductive block, applying 100V min., increasing 100V/sec. for 5 sec.	DR=0.5%
Humidity	350 hrs. at 40°C, 90 to 95% Rh	DR=0.5%
Solderability	Dipped in Sn/Pb(60/40) at 235°C, 5 sec. 1.5mm from the body.	95% f of tested surface covered
Vibration	By MIL STD. 202, 201A	
Terminal Strength	Traction, applied 2.5 kg. for 10 sec. Bends, 2 bends 90° applying load to terminals of 0.5 kg. Twist 2 successive turns 180°, 6 mm from body.	No visible damage
Resistance To Solvents	Trichlorethylene, TMC as the most aggressive for 60 sec. at boiling point.	No visible damage

ZR25-0R0-C / ZR12-0R0-C



MIN

ZR25-0R0-W



•Also available in Surface Mount, see RM series.

PART NUMBER EXAMPLE

ZR 25 R - 0R0 - W