

Model 112

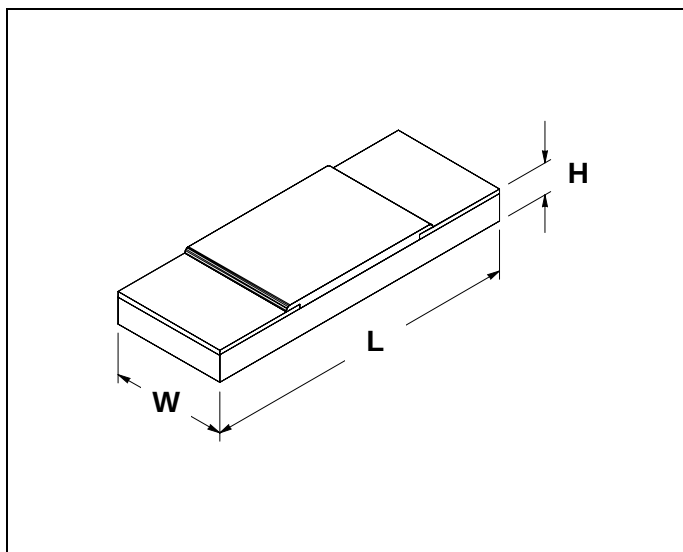
High Megohm Miniature Chip Resistor



Model 112 High Megohm Miniature Chip Resistor has thick film platinum/gold terminals fired to one side of a ceramic chip at about 900°C. The resistive glass does not contain any organic materials and is applied as a continuous film so exposure in hard vacuum environments will not create any problems due to outgassing.

Platinum/gold terminals can be soldered. However, ultrasonic ball bonding using gold wire has proven the best way to bond to standard platinum/gold terminals.

For TC bonding using gold or aluminum wire, this chip resistor is available with gold terminals on special order.



Applications:

- Hybrid Circuits
- High Impedance Load Resistors
- Low Noise, High Gain Feedback Resistors
- Low Current Biological & Medical Instrumentation
- Photon Infrared Detectors
- Piezoelectric Accelerometers
- Hydrophone Preamplifiers
- Extremely Low Noise Cryogenically Cooled First Stage Detection Circuits
- Electret Microphones
- Telecommunications Line Station Monitoring

Dimensions	L	W	H
Inches	0.105	0.038	0.015
(Tolerance +/-)	0.005	0.003	0.003
Millimeters	2.67	0.97	0.38
(Tolerance +/-)	0.13	0.08	0.08

SPECIFICATIONS

Tolerance: 1×10^6 to $9 \times 10^9 \Omega \pm 5\% \pm 10\% \pm 20\% \pm 30\%$
 1×10^{10} to $1 \times 10^{12} \Omega \pm 10\% \pm 20\% \pm 30\%$

Noise figure, 1V bias, noise above thermal (Johnson) noise level: 0.5 dB

Operating Voltage Range (Recommended): 0 to 1 Volt

Maximum Operating Voltage: to 60 Volts

Operating Temperature: -270°C to +200°C
 (3K to 473K)

Resistors with intermediate values are available. Resistors below 1×10^6 as well as resistors beyond 1×10^{12} are also available (special order).

Note: Each resistor is measured at 1 VDC @ 25°C. Testing at other voltages is available on special order.