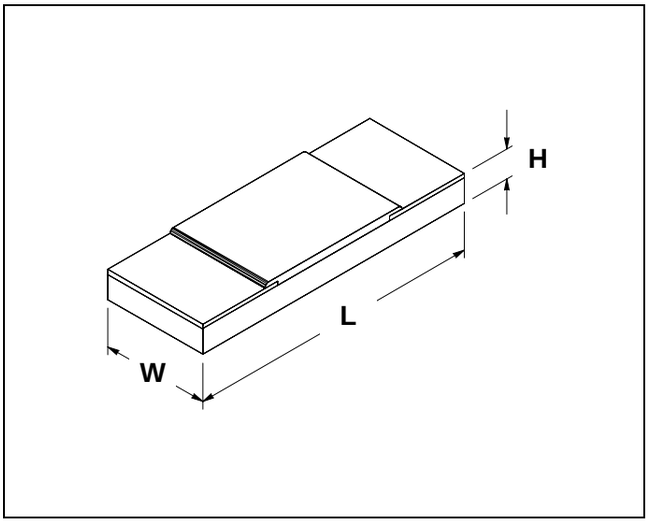
Model 112

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: ..... $1X10^6$ to $9X10^9$ Ω ±5% ±10% ±20% ±30%
$1X10^{10}$ to $1x10^{12}$ Ω ±10% ±20% ±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 $1X10^6$ as well as resistors beyond $1X10^{12}$ are also available (special order).

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

Worldwide Eltec Product Distribution and Free Technical Support:
Silverlight Ltd., Glaernischstrasse 59, CH-8712 Staefa, Switzerland
info@silverlight.ch http://www.eltec.ch