

Model 102

High Megohm Chip Resistor With Leads



Model 102 incorporates an ELTEC Model 112 chip resistor element with nickel ribbon leads soldered to the terminals. These leads permit connection by soldering or spotwelding. The Model 102 permits the use of ELTEC miniature chip resistors by those who do not have the bonding equipment required to utilize resistors in chip form. A coating of hard, moisture immune epoxy is used to protect the resistive element. This epoxy qualifies for use in a vacuum to 10^{-7} torr (satisfactory operation at 10^{-9} reported). However, this resistor can be supplied without an epoxy coating if desired.

Resistor Dimensions*	L(Max)	W(Max)	H(Max)
Inches	0.125	0.048	0.045
Millimeters	3.18	1.22	1.14
Nickel Leads	L(Min)	W(Max)	H(Max)
Inches	0.500	0.012	0.004
Millimeters	12.7	0.305	0.102

* dimensions include epoxy encapsulation

Applications:

- High Impedance Load Resistors
- Low Noise, High Gain Feedback Resistors
- Low Current Biological & Medical Instrumentation
- Photon Infrared Detectors
- Piezoelectric Accelerometers
- Hydrophone Preamplifiers
- Electret Microphones
- Telecommunications Line Station Monitoring

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: -25°C to $+170^\circ\text{C}$
 (248K to 443K)

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

Note 2: If user anticipates difficulty soldering nickel ribbon leads, tinned nickel ribbon leads are available on special order.

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