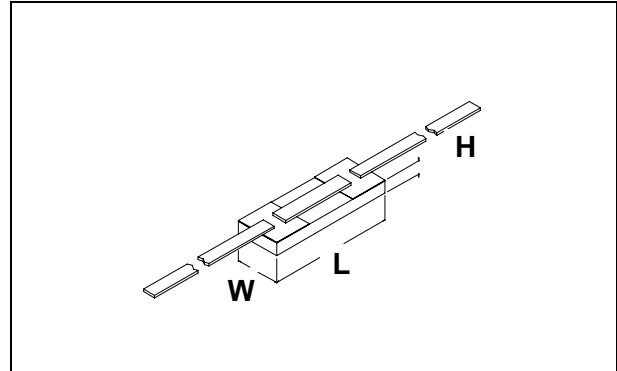


Model 102M50 Model 102M50R (RoHS Compliant)



High Megohm Chip Resistor With Leads

Model 102M50 incorporates an ELTEC Model 112M50 chip resistor element with nickel ribbon leads soldered to the terminals. These leads permit connection by soldering or spotwelding. The Model 102M50 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.



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

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

SPECIFICATIONS

Value / Tolerance: 1×10^6 to $9 \times 10^9 \Omega \pm 5\% \pm 10\% \pm 20\% \pm 30\%$
 1×10^{10} to $1 \times 10^{11} \Omega \pm 10\% \pm 20\% \pm 30\%$
 2×10^{11} to $1 \times 10^{12} \Omega \pm 20\% \pm 30\%$

Tighter tolerances available on a "Best Efforts" basis

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 up to 5×10^{12} maximum are also available (special order).

RoHS compliant resistors (Model 102M50R) are available in certain values. Contact ELTEC for further information.

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.

NOTICE: The information provided herein is believed to be reliable. However, ELTEC Instruments, Inc. assumes no responsibility for inaccuracies or omissions. Due to industry components being incorporated into ELTEC's devices and ELTEC continually striving for product improvement, specifications may change without notice.



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