



9331G HIGH STANDARD RESISTOR



Featuring

- ▶ High Stability
- ▶ 1 MΩ to 100 TΩ
- ▶ Split Guard Circuit
- ▶ Internal Temperature Sensor
- ▶ Custom Values Available
- ▶ NIST Design
- ▶ Includes Calibration Data

Overview

The 9331G Series of High-Accuracy Resistance Standards are available in standard values from 1 MΩ to 100 TΩ and custom values available at any resistance therein.

High stability and supplied alpha and beta temperature coefficients of the 9331G make them ideal for easy transport and operation in any working environment within the range of 18 °C to 28 °C. The resistance standards require no controlled oil or air bath to meet specifications, however, for improved performance, they can be placed in an air bath such as Model 9300 or 9300A.

The Model 9331G is based on a NIST design which includes the split guard design and internal temperature sensor (Figure 1). The split guard circuit design allows for applying independent guard voltages at each side of the resistor.

All resistor connections are type N. Several adapter cables from N-Type to GR, BNC, etc. are available.

The Model 9331G is hermetically sealed in a shielded enclosure and isolated from the case.

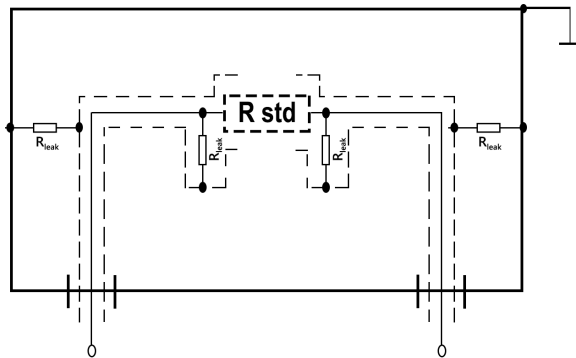


Figure 1 - 9331G Guard Circuit

Feature	Benefit
Split Guard Circuit	Allows independent guarding voltages at high and low terminals
Common N-Type Connectors	Uses affordable Low Noise RG58 cable and N-Type Connectors
Custom Values Available	Specify what values you need for your application
Low TC plus Temp Sensor	Allows monitoring internal air temperature of standard



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Specifications: Rev 15

Model	Nominal Value (Ω)	Tolerance Value ($\times 10^{-6}$)	Stability 1 Year ($\times 10^{-6}$)	Stability 2 Years ($\times 10^{-6}$)	Temperature Coefficient* ($\times 10^{-6}/^{\circ}\text{C}$)	Maximum Voltage (V)	Voltage Coefficient ($\times 10^{-6}/\text{V}$)
9331G/1M	1 M	2	< 5	< 2.5	± 0.4	316.2	
9331G/10M	10 M	5	< 10	< 10	± 5	1 k	0.2
9331G/100M	100 M	10	< 20	< 10	± 5	1 k	0.2
9331G/1G	1 G	30	< 25	< 10	± 5	1 k	0.5
9331G/10G	10 G	10000	< 25	< 20	± 200	1 k	1
9331G/100G	100 G	10000	< 200	< 50	± 200	1 k	5
9331G/1T	1 T	10000	< 500	< 300	± 200	1 k	5
9331G/10T	10 T	50000	< 700	< 500	± 200	1 k	25
9331G/100T	100 T	100000	< 5000	< 2500	$\pm 10,000$	1 k	200

* Evaluated in the range of $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$

Dimensions (L × W × H):
200 x 100 x 81 (mm)

Weight:
1 kg

Shipping Weight:
Provided with Quote

Mains Power:
N/A

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