

R210A

Reference resistor



Highlights

- ❖ Precise source of reference resistance
- ❖ Excellent short-term and long-term stability
- ❖ Tolerance to nominal value within 0.01%
- ❖ Reference value and temperature coefficient measured and specified for each unit
- ❖ Standard and custom values available
- ❖ No thermal stabilization required
- ❖ Flexible cable termination
- ❖ Compact size and low weight
- ❖ Application as external standard to eliminate internal drift errors in thermometer readouts
- ❖ Application as calibration transfer standard
- ❖ Application as check standard

Specifications Summary

Reference resistor	
Resistor element	Vishay VHP101 hermetically sealed foil resistor
Resistor connection type	4 wire
Connection cable	1 metre (custom sizes available on request)
Cable termination	Banana plug (custom termination available on request)
Standard values	25 Ω, 100 Ω, 400 Ω, 1kΩ, 2 kΩ, 10 kΩ, 20 kΩ (on stock)
Any custom value	25 Ω to 100 kΩ (custom order with longer lead times)
Tolerance from nominal value	0.01%
Stability	< ±2 ppm/year typical, ±5 ppm/year max*
Temperature coefficient	< ±0.5 ppm/°C typical, actual value at 23 °C specified
Operating temperature	10 °C to 36 °C
Power dissipation	300 mW max, less than 5 mW recommended
External dimensions (W x H x D)	55 x 25 x 85 mm (excluding cable)

*Under laboratory conditions (low power, no thermal or mechanical shock)

Ordering Information

Description	Order code
R210A Reference resistor	BH-B006
UT-ONE B03A thermometer readout**	BH-B003
UT-ONE S04A thermometer readout**	BH-B008
UT-ONE S12A thermometer readout**	BH-B007

** R210A Reference resistor is recommended accessory for UT-ONE thermometer readouts, but may also be used as a reference for any other resistance-measurement instrument.