

## LOW RESISTANCE STANDARDS

- ) REFERENCE RESISTANCE STANDARDS
- ) EXCELLENT STABILITY
- ) OPTIMIZED FOR 20, 23 OR 25 °C
- ) 1 OHM TO 10 MICRO-OHMS

Ohm-Labs' 2000-series Low Resistance Standards are designed as primary laboratory references for maintaining the ohm at levels below one ohm.

Based on recent advances in materials processing, these standards are designed to provide good long term stability.

Models 2000 to 2003 (1 ohm to 0.001 ohm) have a nickel-chromium alloy element, carefully heat treated for low temperature coefficients of resistance (TCR).

Models 2004 and 2005 (100 and 10 micro-ohms) are made with Manganin alloy elements, housed in a perforated can for improved dissipation of heat.

Due to the higher temperature coefficient of resistance (TCR) of the 2004 and 2005 models, a 10 K thermistor is installed into these models to provide better characterization of the standard.

All models are supplied with an ISO17025 accredited report of calibration, including temperature coefficient data.

2000-series standards are available in intermediate values by special order.

**Notes:**

- Initial 12 month stability < 10 ppm
- Tolerance is accuracy at time of manufacture
- Temperature coefficients are at 20, 23 or 25 °C +/-5 °C.

**Physical:**

- 2000 - 2004:  
89 mm dia. X 159 mm high (3.5" x 6.25"); 1.5 kg (3 #)
- 2005:  
267 mm dia. X 305 mm high (10.5" x 12"); 7 kg (14 #)



MODEL 2005 10 MICRO-OHM STANDARD

For secondary low resistance standards, please see our 1000-series resistors. For accurate current measurement, please see information on our precision current shunts.

Model Number	Nominal Resistance	Tolerance in ppm	Rated Current	Temperature Coefficients
2000	1 Ohm	<5	1 Amp	< 2 ppm / °C
2001	0.1	<5	3	
2002	0.01	<15	10	
2003	0.001	<20	30	< 15 ppm / °C
2004	0.000 1	<50	100	
2005	0.000 01	<250	500	
Special Values available on request – use the following format				
Specify 20(X)(Y)	20 = 2000 Series	X = Resistance	Y = Range	2051 = 0.5 2023 = 0.002



ISO17025 accredited calibration included.

