

## Primary Standard Resistor

### FEATURES

- Excellent long-term stability of resistance, less than 3 ppm/year
- Low temperature coefficient, less than 0.2 ppm/°C
- The resistance value may be specified from 1Ω to 10 MΩ
- Excellent AC characteristics due to non-wirewound technology
- Compact and sturdy construction designed for easy operation and storage
- Certificate of Calibration and Inspection sheets traceable to NMIJ\* are provided at shipment.  
\*NMIJ: National Metrology Institute of Japan



### MASS

Approx. 2.5 kg (5.5 lbs)

### DESCRIPTION

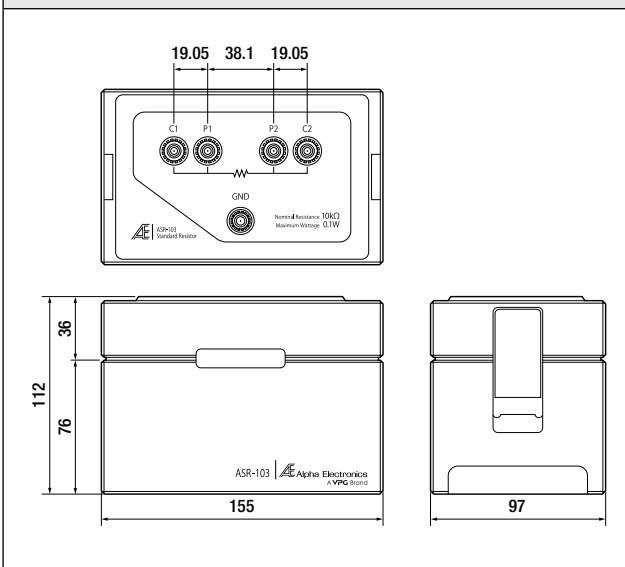
The ASR series is an extremely stable standard resistor. Alpha's Ni/Cr alloy Bulk Metal® Foil technology is used as the resistive element, providing high stability and low temperature coefficient. The process of building a standard resistor requires significant experience and a great degree of skill. Due to our long-term experience in developing and enhancing ultra stable Bulk Metal® Foil technology, we are able to provide products with consistency of performance under strict quality control.

With the extreme stability of this resistor relative to temperature change, the ASR can be used in air without oil bath or critical environmental temperature control eliminating added expense and maintenance problems.

The ASR is designed to be used in a broad range of environments—from a production floor for making precise measurements, to a corporate traceability system as a calibration and reference standard.

The resistors are mounted in a compact sturdy box with cover whose construction is designed to protect the resistor and terminals from any damages.

### CONFIGURATION in millimeters



### SPECIFICATIONS

Series	Nominal Value	Accuracy	Uncertainty of Calibration	Temp. Coefficient	Temp. Retrace	Stability	Power Rating	Power Coefficient	Max. Working Temp.	Max. Working Current	Max. Working Voltage	Operating Temp. Range	Storage Temp. Range	Number of Terminals
ASR-1R0	1Ω	±5	±2.5 @ 23°C	±0.2 @ 0~23°C 23~50°C	±2 @ 23~0°C ~23°C 23~50°C ~23°C	±3	0.5	±5	50	707	0.70	0~50	-10~60	5
ASR-100	10Ω						100	1.00						
ASR-101	100Ω						31.6	3.16						
ASR-102	1kΩ						10.0	10.0						
ASR-103	10kΩ						3.16	31.6						
ASR-104	100kΩ						1.00	100						
ASR-105	1MΩ						0.31	316						
ASR-106	10MΩ	±10	±5	±0.5		±6		±3		0.10	1000			3

\* Power=Power rating