High Accuracy Standard Resistance

SRR Series Page 1 of 1

Four-terminal standard resistors for low values of 0.1 Ω or less. These standards are used for accurate current measurements and for comparisons of low resistances. At the base and at the upper flange there are openings which allow air to circulate or oil to flow through when used in an oil bath.

- Calibration standard
- Reference measuring point in measurement circuit
- · Reference resistor in bridge circuit
- Shunt
- · Maximum 200 A current in oil



SPECIFICATIONS

| Model | Nominal Value (Ω) | Adjustment to Nominal Value | - | m Current A) Oil | Temperature Coefficient (ppm/°C) | Stability typical (ppm/yr) |
|---------|-------------------------|--------------------------------|-----|------------------------|--|----------------------------------|
| SRR0001 | 0.0001 | 0.02% | 100 | 200 | 20 | 25 |
| SRR001 | 0.001 | 100 ppm | 32 | 60 | 25 | 25 |
| SRR01 | 0.01 | 100 ppm | 10 | 20 | 5 | 10 |
| SRR1 | 0.1 | 30 ppm | 3 | 6 | 5 | 10 |

Test Conditions - 25°C in Oil

| Model | Nominal Value (Ω) | Current (A) | Power (mW) |
|---------|-------------------------|----------------|---------------|
| SRR0001 | 0.0001 | 30 | 90 |
| SRR001 | 0.001 | 10 | 100 |
| SRR01 | 0.01 | 3 | 90 |
| SRR1 | 0.1 | 1 | 100 |

Resistance Elements: $0.1~\Omega$, bifilar winding on cylindrical brass formers with PTFE insulation. 0.01,~0.001,~and~0.0001 ohm resistance material in the form of straight rods or loops supported on 12 mm brass conductors

Terminals: Potential - Copper 4 mm Current - Brass

Top Panel: Bakelite marked with the value, class designation and serial number

Case: Light alloy, black anodized to give maximum heat radiation

Thermometer Tube: Slotted extending the length of the resistance element

Label: Each standard is fitted with a label that describes its characteristics and operating parameters

Dimensions: 16 cm H x 9 cm Dia (6.3" x 3.55")

Weight: 0.9 kg (2 lbs)

