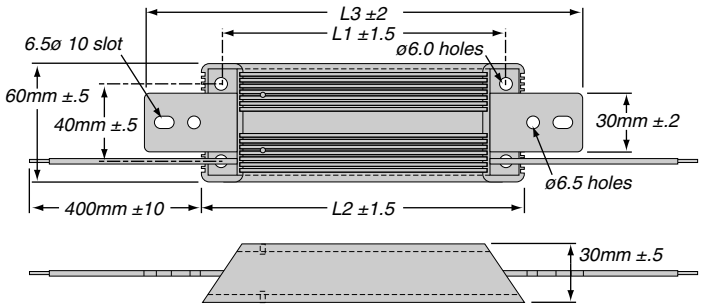
# *SH Series*

## Precision Metal-Clad Shunts




| Series | Rated Current (A) | Rated Voltage (mV) | Resistance (mΩ) | Mass (g) | Dimensions (mm) $L_1$ ±1.5 | $L_2$ ±2 | $L_3$ ±2 |
|---|---|---|---|---|---|---|---|
| SH2 | 100 | 100 | 1.0000 | 650 | 146 | 165 | 225 |
| | 150 | 100 | 0.6666 | 650 | 146 | 165 | 225 |
| | 200 | 100 | 0.5000 | 650 | 146 | 165 | 225 |
| SH3 | 250 | 100 | 0.4000 | 1100 | 196 | 215 | 275 |
| | 300 | 100 | 0.3333 | 1100 | 196 | 215 | 275 |

### ORDERING INFORMATION

RoHS Compliant

**S H 2 - 2 0 0 R 0 0 0 5 D E**

- **Series**
- **Size**
- **Current**
- **Resistance** *see table*
- **Tolerance** B = ±0.1%, D = ±0.5%

Precision metal clad resistors designed in four-terminal technique, are distinguished by high load capacity as well as excellent accuracy. Isolated voltage and current connections making them suitable for very precise current measurements. The simple four port Kelvin design ensures easy installationon large current bus bars. Units have a low inductance, heavy copper terminals. Applications include: battery testing, current detection in precise power sources, constant current sources, industrial power conversion circuits, HEVs, fuel cells and constant electronic loads.

### SPECIFICATIONS

**Temp. Range:** -55°C ~ +110°C

**Insulation Resist.:** 100MΩ min.

**Dielectric Withstanding Voltage:** AC 500V for 1 minute

**Temp. Coefficient:** Max. 30ppm/°C [20°C and 60°C]

### PERFORMANCE DATA

| Test | Method | Maximum ΔR |
|---|---|---|
| Short Time Overload | 5x Power rating 5 sec. | ±0.3% |
| Moisture Resistance | 40°C, 95% RH, DC100V case to terminal, 500 hours | ±0.5% |
| Thermal Shock | -65°C 30 minutes, +90°C 30 minutes 25 cycles | ±0.2% |
| Vibration | 10Hz-55Hz-10Hz (1min.), 2 hours each direction | ±0.2% |
| Moisture Load Life | 40°C, 95% RH, 0.1XPower rating 1.5 hours on, 30 minutes off, 500 hours | ±0.5% |
| Load Life | Power rating 1.5 hours on, 30 min. off, 500 hours | ±0.5% |

### STANDARD PART NUMBERS FOR SH SERIES

| Part | Rated Current (A) | Rated Voltage (mV) | Resistance (mΩ) | Resistance Tolerance |
|---|---|---|---|---|
| SH2-100R0010DE | 100 | 100 | 1.0000 | 0.5% |
| SH2-150R0006DE | 150 | 100 | 0.6666 | 0.5% |
| SH2-200R0005DE | 200 | 100 | 0.5000 | 0.5% |
| SH3-250R0004DE | 250 | 100 | 0.4000 | 0.5% |
| SH3-300R0003DE | 300 | 100 | 0.3333 | 0.5% |