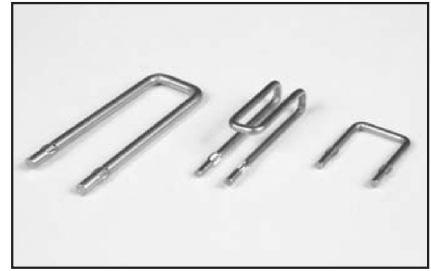


# Current Sensing Resistors

The extremely low resistance(3mΩ) makes these resistors suitable for high power current detection. Various pitches and heights are available. These are all custom-made, non-inductive products exhibiting easy soldering.



Wire Wound Resistors

Current Sensing Resistors

Precision Resistors

Power Film Resistors

High Voltage Resistors

Bulk Ceramic Resistors

Heaters

## GENERAL SPECIFICATIONS

| Model  | Φd[Diameter] | Maximum Current Rating[A] | Resistance Range [mΩ] | Resistivity [mΩ/10mm] | Resistance Tolerance[%]         | Rated Ambient Temperature |
|--------|--------------|---------------------------|-----------------------|-----------------------|---------------------------------|---------------------------|
| CSR 04 | 0.4          | 2.0                       | 70 ~ 200              | 38.98                 | ≥ 20mΩ J [±5]<br>< 20mΩ K [±10] | +70°C                     |
| CSR 05 | 0.5          | 2.5                       | 50 ~ 150              | 24.95                 |                                 |                           |
| CSR 06 | 0.6          | 3.0                       | 50 ~ 100              | 17.34                 |                                 |                           |
| CSR 07 | 0.7          | 4.0                       | 30 ~ 70               | 12.74                 |                                 |                           |
| CSR 08 | 0.8          | 4.5                       | 20 ~ 50               | 9.747                 |                                 |                           |
| CSR 09 | 0.9          | 5.0                       | 20 ~ 40               | 7.702                 |                                 |                           |
| CSR 10 | 1.0          | 5.5                       | 15 ~ 30               | 6.238                 |                                 |                           |
| CSR 11 | 1.1          | 6.0                       | 15 ~ 20               | 5.157                 |                                 |                           |
| CSR 12 | 1.2          | 7.0                       | 10 ~ 20               | 4.332                 |                                 |                           |
| CSR 13 | 1.3          | 7.5                       | 10 ~ 20               | 3.693                 |                                 |                           |
| CSR 14 | 1.4          | 8.0                       | 10 ~ 20               | 3.184                 |                                 |                           |
| CSR 15 | 1.5          | 9.0                       | 10 ~ 20               | 2.773                 |                                 |                           |
| CSR 16 | 1.6          | 9.5                       | 10 ~ 15               | 2.436                 |                                 |                           |
| CSR 18 | 1.8          | 11.0                      | 5 ~ 10                | 1.925                 |                                 |                           |
| CSR 20 | 2.0          | 12.0                      | 5 ~ 10                | 1.560                 |                                 |                           |

## CHARACTERISTICS

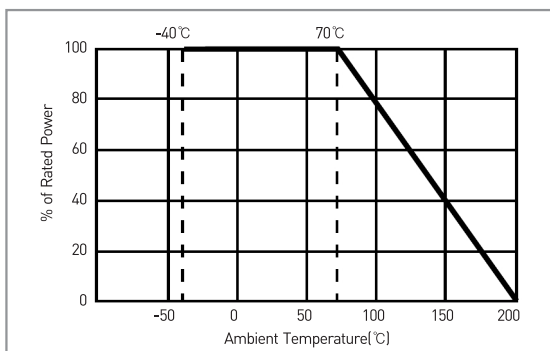
Values in [ ] mean change in Ω after test

|                         |  |  |
|-------------------------|--|--|
| Temperature Range       | -40°C ~ +155°C                                     |  |
| Temperature Coefficient | 9.0A ≥±100ppm/°C maximum, 9.5A ≤±260ppm/°C maximum |  |
| Short Time Overload     | ±[2%]  | 2.5 x Power rating for 5 seconds                     |
| Moisture Resistance     | ±[2%]  | 40°C, 95% RH, 240 hours                              |
| Heat Resistance         | ±[2%]  | 200°C, 2 hours                                       |
| Solderability           | 90% Coverage minimum                               | 235°C, 5 seconds                                     |
| Thermal Shock           | ±[2%]  | Power Rating 30 minutes on, -40°C, 15 minutes off    |
| Load Life               | ±[5%]  | Power Rating, 1.5hours on, 30minutes off, 1000 hours |

## ORDERING PROCEDURE

| Model  | Type | Nominal Resistance | Resistance Tolerance | Terminal Pitch |
|--------|------|--------------------|----------------------|----------------|
| CSR 16 | A    | 10mΩ               | K                    | 10             |

## DERATING CURVE



## DIMENSIONS [mm]

