# CSR Series

Ultra Low Ohm (Metal Strip) Chip Resistor

RIEDON

RoHS compliant



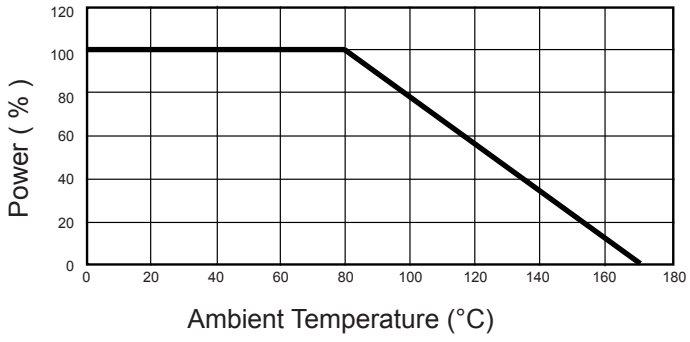

- **Resistances from 0.5 mOhm to 15 mOhm**
- **Power Rating up to 3 Watts**
- **Resistance Tolerances to ± 1%**
- **Customized Resistance Available**
- **TCR's to ±50 ppm/K**
- **Sizes: 1206 / 2010 / 2512**

## SPECIFICATIONS

| Type | Power Rating ( W ) at 80°C | Resistances ( mΩ ) | TCR ( ppm/°C ) | Tolerances | Operating Temperature Range | MAX Operating Voltage |
|---|---|---|---|---|---|---|
| **CSR1206** | 1 | 1 - 10 | ±50 | 1%<br>3%<br>5% | -55°C<br>to<br>+170°C | √(P*R) |
| **CSR2010** | 1.5 | 1 - 10 | ±50 | | | |
| **CSR2512** | 1 | 0.5, 0.75, 1, 1.5, 2<br>11, 12, 13, 14, 15 | ±50 | | | |
| | | 2.5, 3, 10 | ±150 | | | |
| | | 4, 5 | ±100 | | | |
| | | 6, 6.5, 7 | ±75 | | | |
| **CSR2512A[1]** | 2 | 0.5, 0.75, 1, 1.5, 2<br>6.5, 7, 8, 9, 10 | ±50 | | | |
| **CSR2512B[1]** | 2.5 | 4, 4.5, 5, 6 | ±50 | | | |
| **CSR2512C[1]** | 3 | 0.5, 0.75 | ±100 | | | |
| | | 1, 1.5, 2, 3 | ±50 | | | |

[1]Indicates green coating

Power Derating Curve

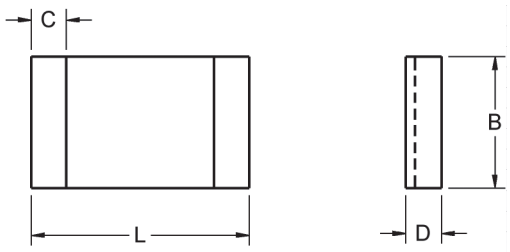



**Riedon Inc.** 300 Cypress Avenue Alhambra CA 91801 ☎ (626) 284-9901 🖷 (626) 284-1704
**www.riedon.com**

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Ultra Low Ohm (Metal Strip) Chip Resistor

## Specifications




| Part | L inches [mm] | B inches [mm] | D inches [mm] | C inches [mm] |
|---|---|---|---|---|
| **CSR1206** | 0.13 [3.2] | 0.06 [1.6] | 0.02 [0.6] | 0.02 - 0.04 [0.6 - 1.1] |
| **CSR2010** | 0.2 [5.08] | 0.1 [2.54] | 0.02 [0.6] | 0.04 - 0.07 [1.04 - 1.84] |
| **CSR2512** | 0.25 [6.35] | 0.13 [3.18] | 0.01 - 0.05 [0.25 - 1.25] | 0.05 [1.30] |
| **CSR2512A,B,C** | 0.25 [6.35] | 0.12 [3.00] | 0.02 [0.6] | 0.05 - 0.11[1.18 - 2.68] |

Table has been simplified. Please inquire for exact dimensions

| Test | Specification | | Test Method |
|---|---|---|---|
| | Black Coating | Green Coating | |
| **Temperature Coefficient of Resistance** | As Spec. | | +25/-55/+25/+125/+25°C |
| **Short Time Overload** | ±0.5% | ±1.0% | 5x rated power for 5 seconds |
| **Load Life** | ±1.0% | ±1.0% | 70±2°C, Max. working voltage for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF" |
| **Dry Heat** | ±1.0% | ±1.0% | at +170°C for 1000 hrs |
| **Solderability** | 95% min. coverage | | 245±5°C for 3 seconds |
| **Resistance to Soldering Heat** | ±0.5% | ±1.0% | 260±5°C for 10 seconds |
| **Thermal Shock** | ±0.5% | ±(0.5%+0.05Ω) | -55°C ~ 150°C, 100 cycles |

*Green Coating can't be used in solder bath

| Reel Sizes | Type | Quantity |
|---|---|---|
| CSR1206 | Embossed Tape | 2000 |
| CSR2010 | | |
| CSR2512 | | |

## Ordering Information

Part Number - Resistance - Tolerance - TCR
Example: CSR2512 1mOhm 1% 50ppm

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