

High-Precision-Resistor-Networks for wire bonding

Series SRN

Features

- Thin Film Technology applied on oxidized Si-substrate or ceramic
- Standard and customized models
- Advantage is the excellent ratio and tracking data
- Qualified for functional LASER adjustment
- RoHS – compliant

Technical Data

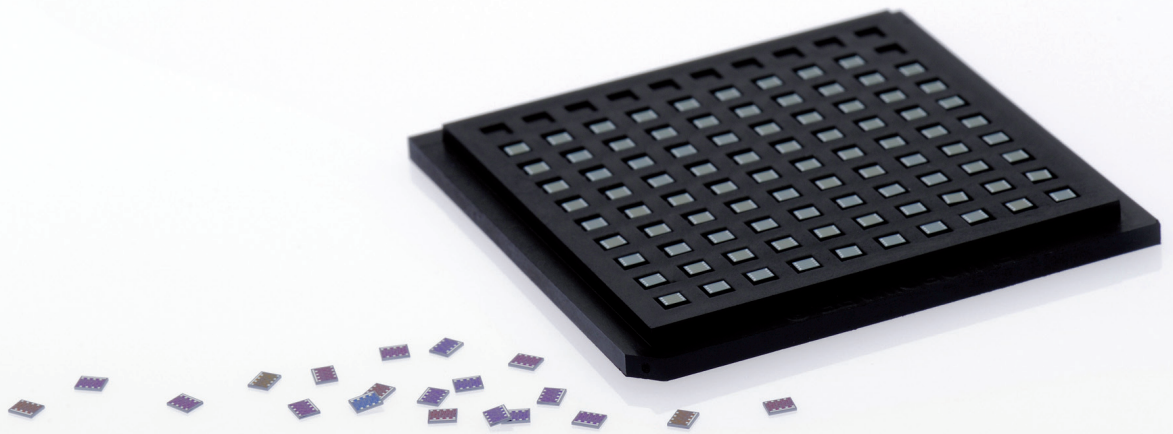
Load Capacity P ₇₀	25 mW/mm ² 10 mW/mm ² for extremely high precision applications	
Range of Values	5 Ω ... 10 MΩ (depending on chip size)	
Isolating Voltage	100 VDC Silicon, 250 VDC Ceramic	
R-Tol.	absolute ratio	± 0.05; ± 0.1; ± 0.25; ± 0.5; ± 1 % < 0.025; < 0.05; < 0.1 %
TCR	absolute tracking	± 5 ¹⁾ ; ± 10; ± 25; ± 50 ppm/K 0.5 ¹⁾ ; 1; 2; 5; 10 ppm/K
Operating Temperature Range	- 55 °C ... + 125 °C	

The client/user has to protect the bonded unit sufficient against environmental influences.

1) Temperature range 0 ... + 75 °C, all resistors have the same value

Other data on request!

Long Term Stability	R-Tol. < 0.25 %	R-Tol. ≥ 0.25 %
Storage 125 °C / 1,000 h – absolute	< ± 0.02 %	< ± 0.05 %
Storage 125 °C / 1,000 h – ratio	< 0.005 %	< 0.01 %



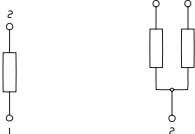
Dimensions

- **Chip Size:**
min.: 0.50 x 0.50 mm²
max.: 6.00 x 10.00 mm²
- **Substrate Thickness:**
0.260 mm ±0.05 (Si)
0.380 mm ±0.05 (Ceramic)
- **Bondpad Dimensions:**
min.: 0.10 x 0.10 mm²
- **Bondpad Metalization:**
Aluminum or Gold
(US-/TS-bondable)

Schematics (examples)

Dimension:

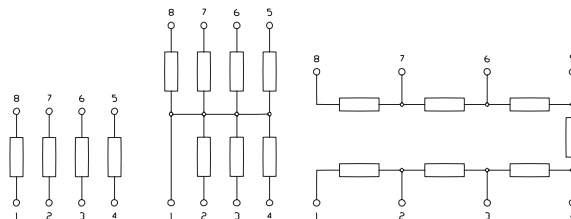
0.50 x 0.50 mm² and
0.76 x 0.76 mm²



Single Resistor

Voltage/
Current Divider

≥ 1.60 x 2.00 mm²



Single Resistor

Current Divider

Voltage Divider

Customized Versions

- Most schematics can be realized.
- Resistor data according to client's specification.
- Customized layout is designed in our development department for best product data.
- we recommend ceramic substrates for operating frequencies above 100 kHz.

Ordering Information

- Resistor value and tolerance (absolute & ratio)
- TCR (absolute & tracking)
- Schematic
- Load capacity
- Chip dimensions
- Operating temperature range
- Specials
- Quantity, expected delivery date

Delivery form

- Waffle pack
- Wafer inked
- Wafer diced on foil

Sales and Development

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