

# Resistor networks for wire bonding [Applications up to 200 °C]

## Series SRN-HT

### Features

- Thin film technology applied on oxidized silicon or ceramic
- Standard and customized models
- Advantage is the excellent ratio and tracking data
- Qualified for functional Laser adjustment
- RoHS – compliant

### Technical Data

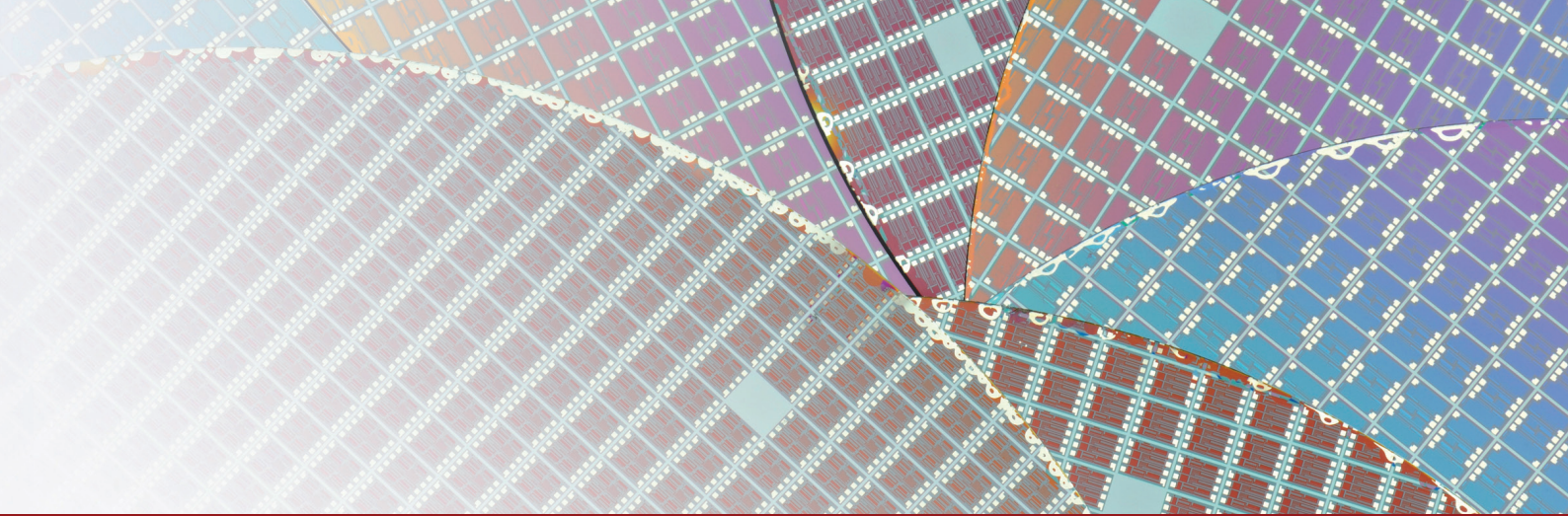
Load capacity $P_{70}$	25 mW/mm <sup>2</sup> 10 mW/mm <sup>2</sup> for extremely high precision applications	
Range of values	5 Ω ... 10 MΩ (depending on chip size)	
Isolating voltage	100 VDC silicon, 1,000 VDC ceramic	
R-Tol.	absolute ratio	± 0.05; ± 0.1; ± 0.25; ± 0.5; ± 1 % < 0.025; < 0.05; < 0.1 %
TCR	absolute tracking	± 5 <sup>1)</sup> ; ± 10; ± 25; ± 50 ppm/K 0.5 <sup>1)</sup> ; 1; 2; 5; 10 ppm/K
Operating temperature range	- 55 °C ... + 200 °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 200 °C / 1,000 h – absolute	< ± 0.20 %	< ± 0.25 %
Storage 200 °C / 1,000 h – ratio	< 0.05 %	< 0.05 %



## Dimensions

- **Chip size:**  
min.: 0.50 x 0.50 mm<sup>2</sup>  
max.: 6.00 x 10.00 mm<sup>2</sup>
- **Substrate thickness:**  
0.260 mm ± 0.05 (silicon)  
0.380 mm ± 0.05 (ceramic)
- **Bondpad dimensions:**  
min.: 0.10 x 0.10 mm<sup>2</sup>
- **Bondpad metalization:**  
Aluminum or Gold  
(US-/TS-bondable)

## Schematics (examples)

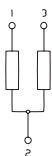
**Dimension:**

**0.50 x 0.50 mm<sup>2</sup> and**

**0.76 x 0.76 mm<sup>2</sup>**

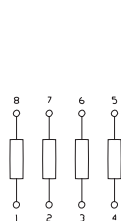


Single Resistor

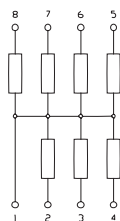


Voltage/  
Current Divider

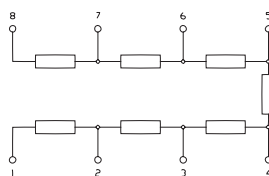
**≥ 1.60 x 2.00 mm<sup>2</sup>**



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 10 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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