

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

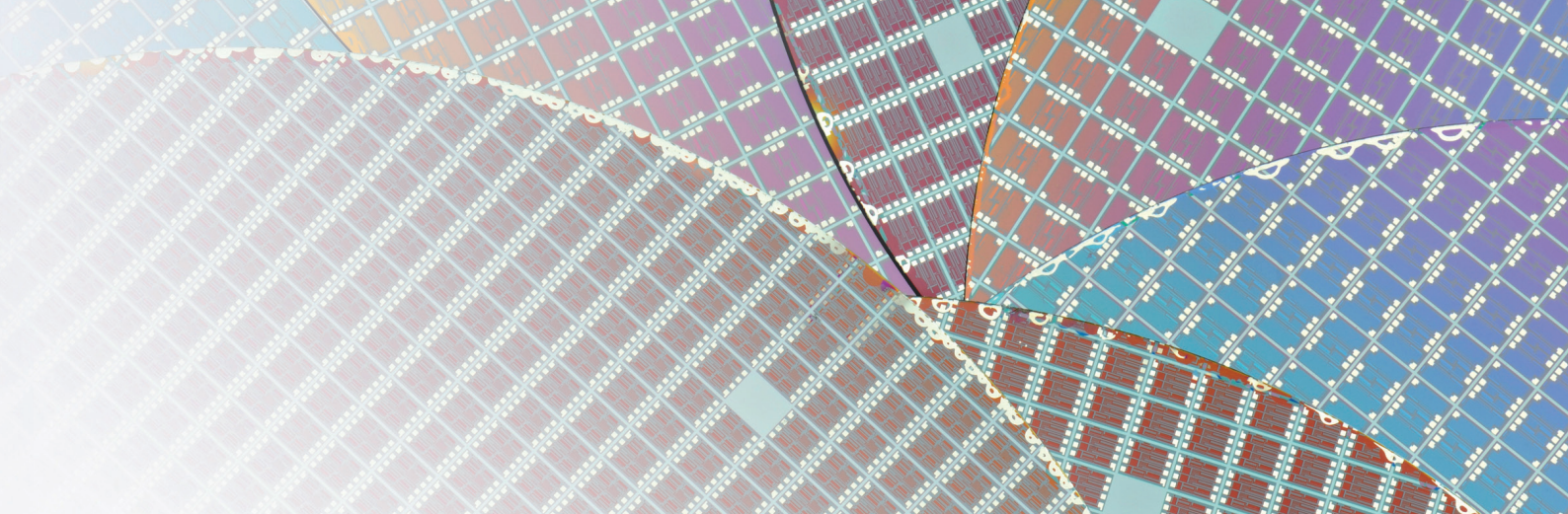
Load capacity P_{70}		25 mW/mm ² 10 mW/mm ² for extremely high precision applications
Range of values		5 Ω ... 10 M Ω (depending on chip size)
Isolating voltage		100 VDC silicon, 1,000 VDC ceramic
R-Tol.	absolute ratio	± 0.05 ; ± 0.1 ; ± 0.25 ; ± 0.5 ; ± 1 % < 0.025; < 0.05; < 0.1 %
TCR	absolute tracking	± 5 ¹⁾ ; ± 10 ; ± 25 ; ± 50 ppm/K 0.5 ¹⁾ ; 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. \geq 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.: $0.50 \times 0.50 \text{ mm}^2$
max.: $6.00 \times 10.00 \text{ mm}^2$
- *Substrate thickness:*
 $0.260 \text{ mm} \pm 0.05$ (silicon)
 $0.380 \text{ mm} \pm 0.05$ (ceramic)
- *Bondpad dimensions:*
min.: $0.10 \times 0.10 \text{ mm}^2$
- *Bondpad metalization:*
Aluminum or Gold
(US-/TS-bondable)

Schematics (examples)

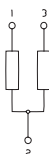
Dimension:

$0.50 \times 0.50 \text{ mm}^2$ and

$0.76 \times 0.76 \text{ mm}^2$

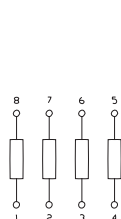


Single
Resistor

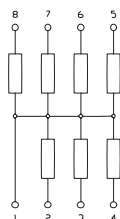


Voltage/
Current Divider

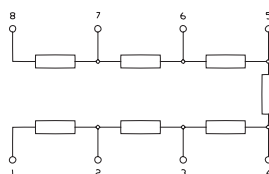
$\geq 1.60 \times 2.00 \text{ mm}^2$



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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