Resistor networks for wire bonding

Series SRN

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 extremly high precision applications	
Range of values Isolating voltage		5 Ω 10 ΜΩ (depending on chip size)	
		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 + 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.: $0.50 \times 0.50 \text{ mm}^2$ max.: $6.00 \times 10.00 \text{ mm}^2$

· Substrate thickness:

0.260 mm ± 0.05 (silicon) 0.380 mm ± 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 $0.76 \times 0.76 \text{ mm}^2$

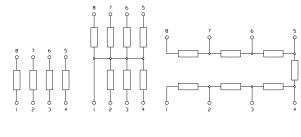




Single Resistor

Voltage/ Current Divider

≥ 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 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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