

Precision-R-Networks for Bonding

Type: **SRN**


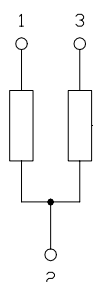
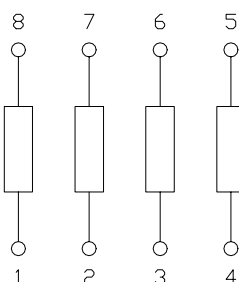
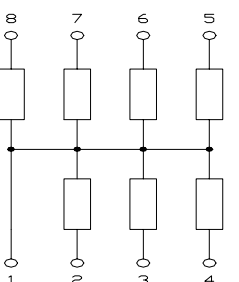
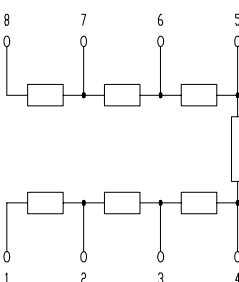
Sizes: **ab 0,50 mm x 0,50 mm bis 6 mm x 10 mm**

Features:

- Thinfilm (NiCr) on passivated Si- or Alumina-substrate
- Standart types and custom networks
- Relative-data (tolerance, TCR and stability) much closer than with single resistors
- Suited for active trimming with laser
- Packaging: Wafflepack, wafer/inked or on foil/inked



Examples of circuits:

Size: 0,5 x 0,5 mm/ 0,75 x 0,75 mm		Size: 1,6 x 2,0 mm		
Single resistor	Current-dividers/ Resistor bridges	Single resistor	Current-dividers/ Resistor bridges	Resistor bridges
				

Dimensions:

Feature	Minimal	Maximal
Chip size	0,50 x 0,50 mm ²	bis 6 x 10 mm ²
Thickness	0,260 ^{±0,025} mm	0,375 ^{±0,025} mm
Contact areas	0,15 x 0,15 mm ²	
Contact area material	Al or Au (US-/TS-bondable)	

Technical data:

Power rating P ₇₀		25 mW/mm ² 10 mW/mm ² for applications of high precision
Resistance range		10 Ω...2,5 MΩ (depending on size)
Working voltage		100 V Silicon, 250 V Alumina
Tolerance	Absolute	± 0,05; ± 0,1; ± 0,25; ± 0,5; ± 1 %
	Relative	< 0,025 ¹⁾ ; < 0,05; < 0,1 %
TCR	Absolute	± 5 ¹⁾ ; ± 10; ± 25; ± 50 *10 ⁻⁶ /K
	Relative	0,5 ¹⁾ ; 1; 2; 5; 10 *10 ⁻⁶ /K
Operating temperature range		-55 °C...+125 °C (+155 °C)
Condition for application		Hermetic sealing Polymer-Passivation

Long term stability		Tol. ≤ 0,25 %	Tol. ≥ 0,25 %
Storage 125 °C 1000h	Absolute	< 0,02 %	< 0,05 %
	Relative	< 0,005 %	< 0,01 %

¹⁾ Temperature range 0...+70 °C,

Other specifications on request.. Structural elements are to be protected from environmental influences.

Customer-specific version:

- Any circuits are possible.
- The parameters of the resistance values are specified by the customer. A customer-specific layout is planned in the company's own development department and implemented technologically.
- In the case of applications in the upper frequency range from 100 kHz the use of ceramic substrates is recommended.

Ordering data:

- Size
- Number and connection of resistors
- Resistance values
- Tolerance and TCR (absolute and relative)
- Power rating
- Temperature range
- Stability requirements



Packaging: Chip Trays, Wafer inked, Wafer foil/inked

Stand: 02/99



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