

Precision-R-Networks for Bonding

Type: SRN

Sizes: 0.50 x 0.50 mm to 6 x 10 mm

Features:

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

Dimensions:

0.50 x 0.50 mm up to 6 x 10 mm

Thickness 0.260 mm minimal 0.375 mm maximal

Contact areas: $\geq 0.15 \times 0.15$ mm Al or Au

US- and TS bondable

(Detailed drawing and layout on request)

Standard versions:

Resistor bridges, single resistors and current-divider
(detailed data on request)

Inquiry and ordering data:

Dimensions

Number and connection of resistors

Resistance values

Tolerance and TCR (absolute and relative)

Power rating

Temperature range

Stability requirements

Packaging

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Technical data – depending on size:

Power rating P_{70} ($P_{125} = 0$ mW)		50 mW/mm ² at tol. ≥ 0.5 % 25 mW/mm ² at tol. = 0.25 % 10 mW/mm ² at tol. ≤ 0.1 %
Resistance range		10 R... 2.5 M (depending on size)
Working voltage U_{-} , U_{eff}		100 V Silicon, 250 V Alumina
Tolerance	absolute relative after active trimming	± 0.05 ; ± 0.1 ; ± 0.25 ; ± 0.5 ; ± 1 % < 0.025 ¹⁾ ; < 0.05; < 0.1 % up to ± 0.05 %
TCR	absolute relative	± 5 ¹⁾ , ± 10 ²⁾ , ± 25 , ± 50 , $\times 10^{-6}/K$ < 1 ¹⁾ , < 2 ²⁾ , < 5, < 10 $\times 10^{-6}/K$

¹⁾ Temperature range 0 ...+ 70°C

²⁾ Temperature range -25 ...+ 125°C

Technical data – general:

Operating temperature range	- 55°C ... + 125°C
Storage temperature range	- 55°C ... + 155°C
Climatic category acc. to DIN EN 60068-1	25/125/56
Condition for application	Polymer-Passivation or Hermetic sealing

Long term stability		Tol. ≤ 0.25 %	Tol. > 0.25 %
Storage 125°C/ 1000 h	absolute	< 0.02 %	< 0.05 %
	relative	< 0.005 %	< 0.01 %
Storage 155°C/ 1000 h	absolute	< 0.1 %	< 0.2 %
	relative	< 0.05 %	< 0.1 %

Issue 09/05