

# SRT Resistor Technology

## SMT-Precision-R-Networks

Type: SCN

Sizes: SOT 223, SO 8, SO 14, SO 16, SO 20L

### Features:

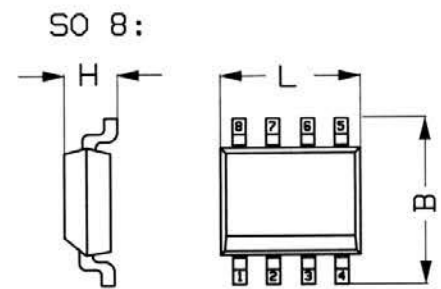
- Thinfilm (NiCr) on passivated Si- or Alumina-substrate
- Standard types and custom networks
- Relative-data (tolerance, TCR and stability) much closer than realizations with single resistors



### Sizes:

Size	L max.	B max.	H max.	n
SOT 223	6.5	7.0	1.6	4
SO 8	5.1	6.7	2.0	8
SO 14	8.9	6.7	2.0	14
SO 16	10.2	6.7	2.0	16
SO 20L	13.0	10.7	2.65	20

### Example



L = Length, B = Width, H = Height (in mm; detail drawings on request)

### Versions:

- Standard: Single resistors, resistor bridges, voltage dividers and current dividers (details on request)
- Custom specific: Every circuitry is feasible

### Inquiry and ordering data:

- Size
- Substrate material (Si, Al<sub>2</sub>O<sub>3</sub>)
- Number and connection of resistors
- Resistance values
- Tolerance and TCR (absolute and relative)
- Power rating
- Temperature range
- Special requirements
- Packaging (bulk, tape/reel, magazine)

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### Technical data – depending on size:

Size	SOT 223	SO 8	SO 14	SO 16	SO 20L
Power rating P <sub>70</sub> (P <sub>125</sub> = 0 mW)	250	250	250	250	500
Resistance range	10R ... 5M	10R ... 5M	10R ... 10M	10R ... 10M	10R ... 10M

### Technical data - general:

Working voltage U <sub>W</sub> , U <sub>eff</sub>	on silicon substrate: 100 V on alumina substrate: 250 V
Tolerance (%) absolute relative	± 0.05; ± 0.1; ± 0.25; ± 0.5; ± 1 < 0.025 <sup>1)</sup> ; < 0.05; < 0.1
TCR (ppm/K) absolute relative	± 5 <sup>1)</sup> , ± 10 <sup>2)</sup> , ± 25, ± 50 < 1 <sup>1)</sup> , < 2 <sup>2)</sup> , < 5, < 10
Operating temperature range	- 55°C ... + 125°C
Storage temperature range	- 55°C ... + 155°C
Climatic category acc. to EN 60068-1	25/125/56
Solderability acc. EN 60068-2-58 (lead free and lead containing)	250°C 3s
Max. soldering temperature acc. EN 60068-2-58	260°C 10s

Long term stability		Tol. ≤ 0.25%		Tol. > 0.25%	
		1000 h	10000 h	1000 h	10000 h
Storage 125°C/1000h	absolute	< 0.02%	< 0.06%	< 0.05%	< 0.1%
	relative	< 0.005%	< 0.02%	< 0.01%	< 0.05%
Storage 155°C/1000h	absolute	< 0.1%	< 0.2%	< 0.2%	< 0.5%
	relative	< 0.05%	< 0.1%	< 0.1%	< 0.2%
Damp heat (56d/40°C/96%)	absolute	< 0.05%		< 0.10%	
	relative	< 0.01%		< 0.05%	

<sup>1)</sup> Temperature range 0 ... + 70°C

<sup>2)</sup> Temperature range -25 ... + 125°C