

SCN-Series

SMT-Precision-Resistor-Networks

Sizes: SO 8, SO 14, SO 16, SO 18L, SO 20L, SSOP 14 ... 20

Features:

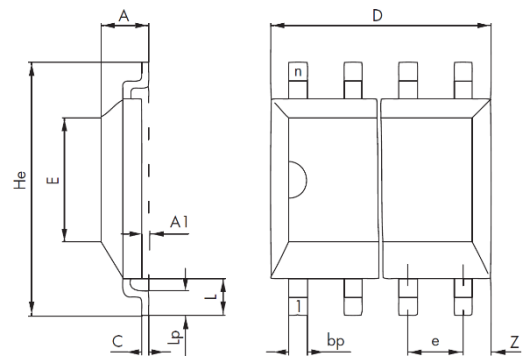
- Thin film (NiCr) applied on passivated Si- or Alumina-substrate
- Standard types and customized networks
- Wide variety of schematics is realizable
- Excellent ratio and tracking data
- Relative-data (tolerance, temperature coefficient and stability) much closer than realizations with single resistors
- Alumina substrate for operating frequencies above 10 kHz



Sizes:

Size	D nom.	He nom.	A nom.	Pitch e	bp	Pins
SO 8	4.90	6.0	1.75	1.27	0.41	8
SO 14	8.65	6.0	1.75	1.27	0.41	14
SO 16	9.90	6.0	1.75	1.27	0.41	16
SO 18L	11.58	10.31	2.54	1.27	0.41	18
SO 20L	12.80	10.31	2.54	1.27	0.41	20
SSOP 14	4.90	6.0	1.75	0.635	0.26	14
SSOP 16	4.90	6.0	1.75	0.635	0.26	16
SSOP 18	8.65	6.0	1.75	0.635	0.26	18
SSOP 20	8.65	6.0	1.75	0.635	0.26	20

SO-Packages:



(all measures in mm)

Inquiry and ordering data:

- Size
- Substrate material (Si, Al₂O₃)
- Number and schematic of resistors
- Resistance values
- Tolerance and temperature coefficient TCR (absolute and relative)
- Power rating
- Operating temperature range
- Special requirements
- Packaging (tube, tape/reel, bulk)
- Quantity

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Technical data – depending on size:

Size	SO 8	SO 14	SO 16	SO 18L	SO 20L	SSOP 14-20
Power rating P_{70} ($P_{125} = 0$ mW)	250	250	250	400	500	250

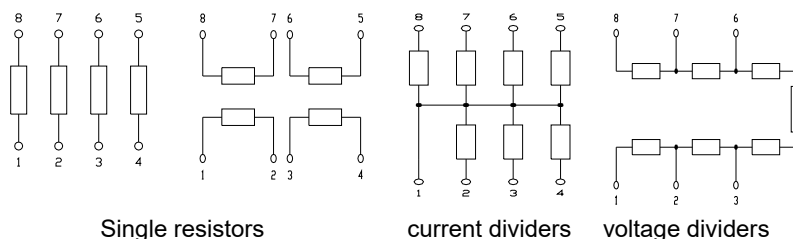
Technical data - general:

Resistance range	5R ... 10M
Isolating voltage	on silicon substrate: 100 V DC on alumina substrate: 1000 V DC
Tolerance (%) absolute relative	± 0.05 ; ± 0.1 ; ± 0.25 ; ± 0.5 ; ± 1 < 0.025; < 0.05; < 0.1
Temperature coefficient TCR (ppm/K) absolute relative	$\pm 5^1$; ± 10 ; ± 25 ; ± 50 < 0.5 ¹ ; < 1; < 2; < 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. to EN 60068-2-58	245°C, 3s
Max. soldering temperature acc. to EN 60068-2-58	260°C, 10s
Moisture Sensitivity Level acc. to J-STD-020	MSL 2 (1 year; <30°C/60% rH)

Long term stability		Tol. $\leq 0.25\%$		Tol. $> 0.25\%$	
		1000 h	10000 h	1000 h	10000 h
Storage 125°C/1000h	absolute	< 0.02%	< 0.06%	< 0.05%	< 0.1%
Continuous Load 70°C	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%	

¹) Temperature range 0 ... + 75°C

Schematics (examples):



Customized versions:

- Every circuitry is feasible
- Layout is designed in our development department for best product data