

# Resistor networks in SMD-Packages

## Series SCN

### Features

- Thin film technology applied on oxidized silicon or ceramic
- Standard and customized models
- Advantage is the excellent ratio and tracking data
- RoHS – compliant

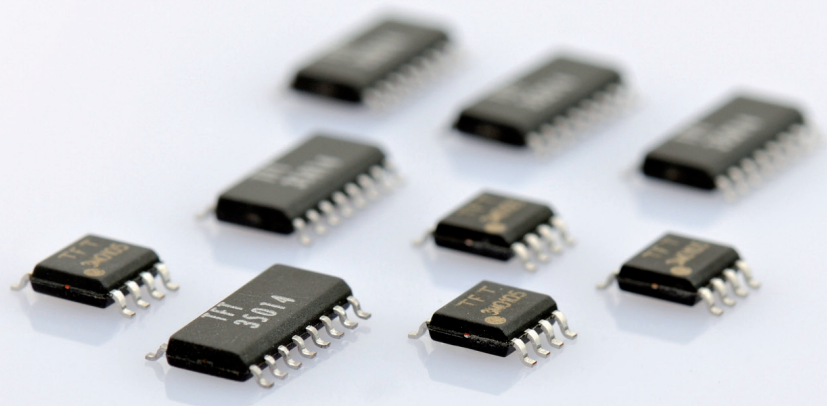
### Technical Data

Isolating voltage		100 VDC (silicon substrate) 1,000 VDC (ceramic substrate)
R-Tol.	absolute ratio	$\pm 0.05$ ; $\pm 0.1$ ; $\pm 0.25$ ; $\pm 0.5$ ; $\pm 1$ % < 0.025; < 0.05; < 0.1 %
TCR	absolute tracking	$\pm 5$ <sup>1)</sup> ; $\pm 10$ ; $\pm 25$ ; $\pm 50$ ppm/K 0.5 <sup>1)</sup> ; 1; 2; 5; 10 ppm/K
Operating temperature range		- 55 °C ... + 125 °C
Solderability <sup>2)</sup> Resistance against solder temperature <sup>3)</sup>		245 °C; 3 s 260 °C; 10 s

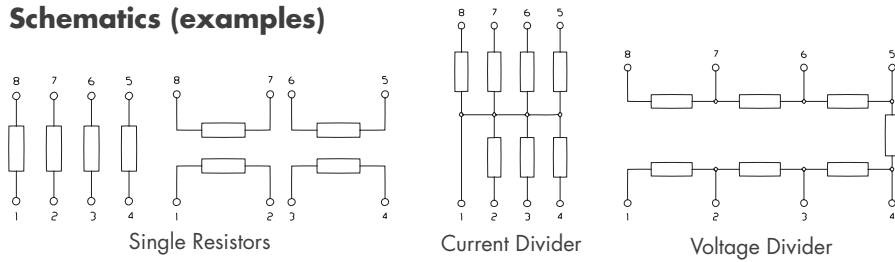
1) Temperature range 0 ... + 75 °C; 2) DIN IEC 68 T2-20, Ta Meth.1; 3) DIN IEC 68 T2-20, Ta Meth.1A  
Other data on request.

Long Term Stability		R-Tol. < 0.25 %		R-Tol. $\geq$ 0.25 %	
		1,000 h	10,000 h	1,000 h	10,000 h
Storage 125 °C Continuous load $P_{70}/70$ °C	absolute ratio	< $\pm$ 0.02 % < 0.005 %	< $\pm$ 0.06 % < 0.02 %	< $\pm$ 0.05 % < 0.01 %	< $\pm$ 0.1 % < 0.05 %
Storage 155 °C	absolute ratio	< $\pm$ 0.1 % < 0.05 %	< $\pm$ 0.2 % < 0.1 %	< $\pm$ 0.2 % < 0.1 %	< $\pm$ 0.5 % < 0.2 %
Temperature/ Humidity (56 d/40 °C/96 %)	absolute ratio	< $\pm$ 0.05 % < 0.01 %		< $\pm$ 0.10 % < 0.05 %	

Package	SOT 223	SOP 8	SOP 14	SOP 16	SOP 18 L	SOP 20 L	SSOP 14 - 20
Load capacity $P_{70}$ (mW) ( $P_{125} = 0$ mW)	250	250	250	250	400	500	250
Value ranges	5R/5M	5R/10M	5R/10M	5R/10M	5R/10M	5R/10M	5R/10M



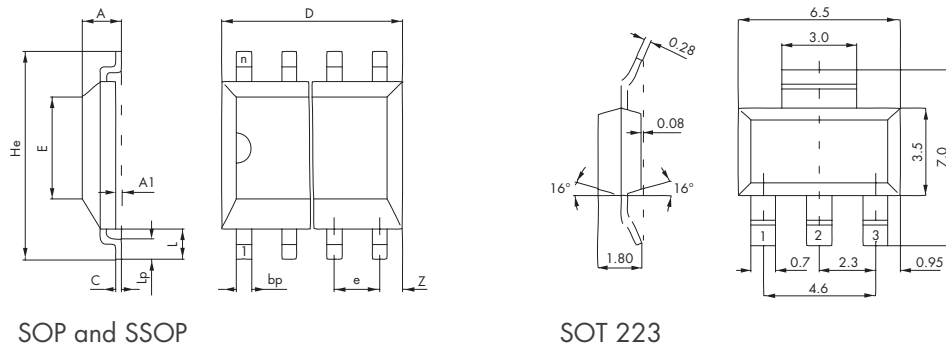
## Schematics (examples)



## Packages

- SOT 223
- SOP 8, SOP 14, SOP 16, SOP 18 L, SOP 20 L
- SSOP 14, SSOP 16, SSOP 18, SSOP 20

## Dimensions



## Values in mm

Package	D nom	E nom	A nom	A1	He nom	e	L <sub>p</sub> nom	bp	C
SOP 8	4.90	3.90	1.75	0.15	6.0	1.27	0.72	0.41	0.20
SOP 14	8.65	3.90	1.75	0.15	6.0	1.27	0.72	0.41	0.20
SOP 16	9.90	3.90	1.75	0.15	6.0	1.27	0.72	0.41	0.20
SOP 18 L	11.58	7.49	2.54	0.20	10.31	1.27	0.76	0.41	0.27
SOP 20 L	12.80	7.49	2.54	0.20	10.31	1.27	0.76	0.41	0.27
SSOP 14	4.90	3.90	1.75	0.15	6.0	0.635	0.72	0.26	0.20
SSOP 16	4.90	3.90	1.75	0.15	6.0	0.635	0.72	0.26	0.20
SSOP 18	8.65	3.90	1.75	0.15	6.0	0.635	0.72	0.26	0.20
SSOP 20	8.65	3.90	1.75	0.15	6.0	0.635	0.72	0.26	0.20

## 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

- Package
- Resistor value and tolerance (absolute & ratio)
- TCR (absolute & tracking)
- Schematic
- Load capacity
- Operating temperature range
- Specials
- Quantity, expected delivery date

## Delivery form

- Tube
- Bulk
- Reel

## Sales and Development

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