

## Thickfilm Resistor Network CN 10x A / CN 10x B

### ► Resistance ranges, tolerances and TC's

<b>Tolerance</b>	± 5%	± 2%	± 1%	± 2%	± 2%
<b>Resistance ranges</b>	>25R - 50R	>50R - 100R	>100R - 1M	>1M - 5M	>5M - 10M

All values within the resistance range are available.  
Lower tolerance-values upon request.

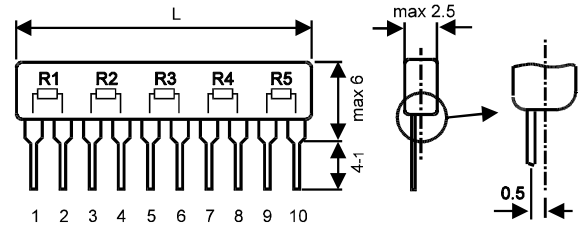
### ► Ratings by IEC 60115-1

Limiting element voltage		≅ 100 V
Rated dissipation	$P_{40}$ ( $\vartheta_0 = 125\text{ °C}$ , 110A)	1.25 W
	$P_{40}$ ( $\vartheta_0 = 125\text{ °C}$ , 110B)	1.35 W
Temp. characteristic		$\pm 100 \times 10^{-6}/\text{°C}$
TC tracking		$\leq 5 \times 10^{-6}/\text{°C}$
Voltage coefficient		$< 5 \times 10^{-6}/\text{V}$
Insulation voltage		> 500 V
Insulation resistance		$> 5 \times 10^{10}\ \Omega$
Climatic category		55 / 125 / 56
Marking		letter
Cleaning solvents	For the removal of flux can be used: ethanol, methanol, isopropanol, propanol, butanol and water; reaction time max. 5 minutes	

### ► Performance

	CN 106A	CN 108A	CN 110A
L max (in mm)	15.8	20.9	25.3
Number of pins resistors	6	8	10
$P_{40}$ (in W)	0.75	1.00	1.25
Weight (in g)	0.4	0.6	0.8

### ► Dimensions CN 10x A



### ► Tests

	Test	Conditions	Requirements
4.13	Overload	5 s, $2.5 \times U_{\text{rat}}$ or $2 \times U_{\text{max}}$	$\Delta R \leq \pm (0.10\%R)$
4.18	Soldering-Resistance to heat	$260 \pm 5\text{ °C}$ , 10 s	$\Delta R \leq \pm (0.10\%R)$
4.19	Rapid change of temp.	$-65\text{ °C}$ , $155\text{ °C}$ , 5x	$\Delta R \leq \pm (0.25\%R)$
4.24	Damp heat, steady	$40\text{ °C}$ , 90% r.H., 56 d	$\Delta R \leq \pm (0.25\%R)$
4.25	Endurance at $70\text{ °C}$	$U_{\text{rat}}$ or $U_{\text{max}}$ 1000 h	$\Delta R \leq \pm (0.25\%R)$
		$U_{\text{rat}}$ or $U_{\text{max}}$ 8000 h	$\Delta R \leq \pm (0.50\%R)$

Section numbers of test and performance requirements refer to IEC 60115-1.

### ► Order examples

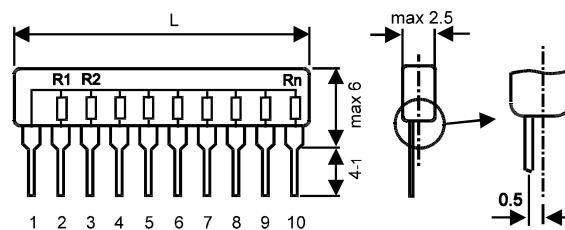
CN 110A      100K      1%  
 ────┬───      ────┬───      ────┬───  
 Type    rated resistance    tolerance

## Thickfilm Resistor Network CN 10x A / CN 10x B

### ► Performance

	CN 104B	CN 105B	CN 106B	CN 107B	CN 108B	CN 109B	CN 110B
$L_{max}$ (in mm)	10.60	12.50	15.80	18.40	20.90	22.70	25.30
Number of pins	4	5	6	7	8	9	10
Resistors	3	4	5	6	7	8	9
$P_{40}$ (in W)	0.45	0.6	0.75	0.90	1.05	1.20	1.35
Weight (in g)	0.25	0.3	0.4	0.5	0.6	0.7	0.8

### ► Dimensions CN 10x B

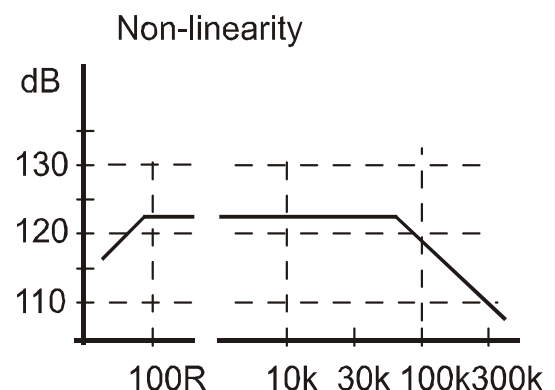
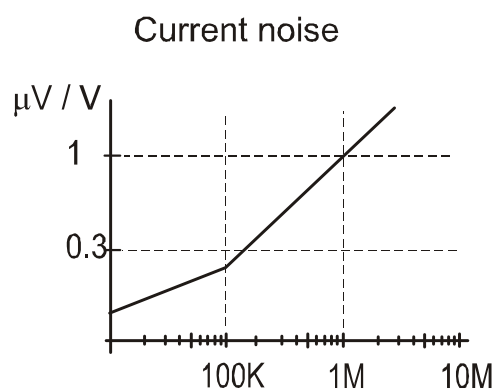
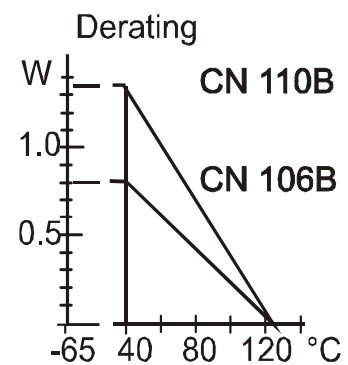
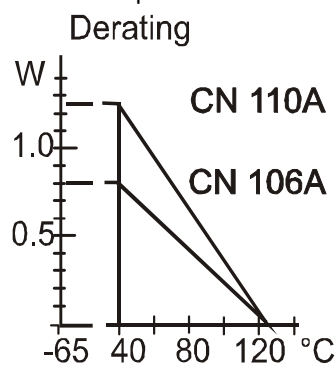


### ► Tests

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4.25	Endurance at 70 °C	$U_{rat}$ or $U_{max}$ 1000 h	$\Delta R \leq \pm (0.25\%R)$
		$U_{rat}$ or $U_{max}$ 8000 h	$\Delta R \leq \pm (0.50\%R)$

Section numbers of test and performance requirements refer to IEC 60115-1.

### ► Rating curves



## Thickfilm Resistor Network CN 10x A / CN 10x B

► Values on stock (delivery max. 5 days)

CN 1xxA				CN 1xxB			
1K	2%	68K	2%	100R	2%	6K8	2%
2K	2%	100k	2%	150R	2%	10K	2%
2K2	2%	200K	2%	220R	2%	22K	2%
3K3	2%	330K	2%	330R	2%	47K	2%
4K7	2%	470K	2%	470R	2%	100K	2%
6K8	2%	680K	2%	680R	2%	200K	2%
10K	2%			1K	2%	330K	2%
20K	2%			2K2	2%	470K	2%
33K	2%			3K3	2%	680K	2%
47K	2%			4K7	2%		

► Order examples

CN 109B	100R	1%
Type	rated resistance	tolerance