

## Thickfilm Resistor CS 007 / CS 007C

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

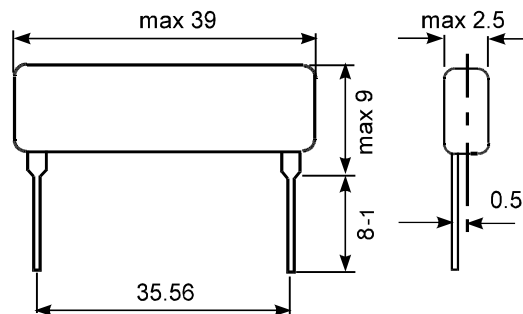
Tolerance	± 1%	± 2%	± 5%	± 10%
Resistance ranges	100K - 100M	>100M - 500M	>500M - 2G	>2G - 10G

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

### ► Ratings by IEC 60115-1

Thermal resistance $R_{th}$		max. 37 K/W
Limited element voltage		≅ 10000 V
Rated dissipation	$P_{70}$ ( $\vartheta_0 = 125$ °C)	1.5 W
	$P_{40}$ ( $\vartheta_0 = 125$ °C)	2.3 W
Climatic category		55 / 125 / 56
Insulation voltage		> 500 V
Insulation resistance		> $10^{10}$ Ω
Temp. characteristics	≤ 250M	± $100 \times 10^{-6} / ^\circ\text{C}$
	> 250M	± $250 \times 10^{-6} / ^\circ\text{C}$
Voltage coefficient		< $5 \times 10^{-6} / \text{V}$
Weight (100 pcs.)		ca. 120 g
Marking		letter
Cleaning solvents		For the removal of flux can be used: ethanol, methanol, isopropanol, propanol, butanol and water; reaction time max. 5 minutes

### ► Dimensions CS 007



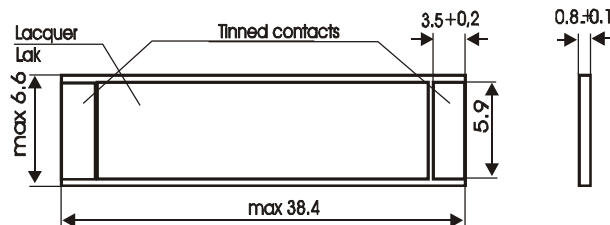
### ► Tests

	Test	Conditions	Requirements
4.13	Overload	5 s, $2,5 \times U_{rat}$ or $2 \times U_{max}$	$\Delta R \leq \pm (0.10\%R)$
4.18	Soldering-Resistance to heat	$260 \pm 5$ °C, 10 s	$\Delta R \leq \pm (0.10\%R)$
4.19	Rapid change of temp.	-65 °C, 155 °C, 5x	$\Delta R \leq \pm (0.25\%R)$
4.24	Damp heat, steady	40 °C, 93% r.H., 56 d	$\Delta R \leq \pm (0.25\%R)$
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.

## Thickfilm Resistor CS 007 / CS 007C

### ► Dimensions CS 007C



### ► Ratings by IEC 60115-1

Voltage against ambient	75 V
Mounting	Face down
Weight (100 pcs)	ca. 110 g

### ► 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	$260 \pm 5 \text{ }^\circ\text{C}$ , 10 s	$\Delta R \leq \pm (0.10\%R)$
4.19	Rapid change of temp.	$-65 \text{ }^\circ\text{C}$ , $155 \text{ }^\circ\text{C}$ , 5x	$\Delta R \leq \pm (0.25\%R)$
4.31	Substrate bending test	10x, 1mm	$\Delta R \leq \pm (0.10\%R)$
4.25	Endurance at $70 \text{ }^\circ\text{C}$	$U_{\text{rat}}$ or $U_{\text{max}}$ 1000 h	$\Delta R \leq \pm (0.50\%R)$
		$U_{\text{rat}}$ or $U_{\text{max}}$ 8000 h	$\Delta R \leq \pm (1.00\%R)$

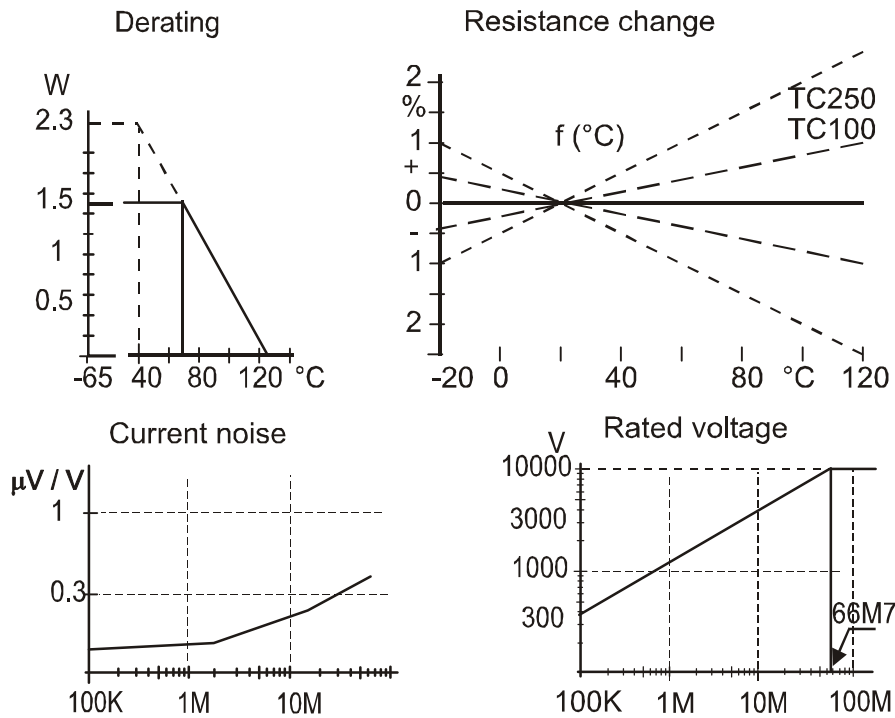
Section numbers of test and performance requirements refer to IEC 60115-1.

### ► Order examples

CS 007	100M	1%
—	—	—
type	rated resistance	tolerance
CS 007C	500M	2%
—	—	—
type	rated resistance	tolerance

# Thickfilm Resistor CS 007 / CS 007C

## ► Rating curves



## ► Values on stock (delivery max. 5 days)

1M	1%	10M	1%	100M	1%	1G	5%
2M	1%	15M	1%	150M	2%	2G	5%
		20M	1%	200M	2%		
		25M	1%	250M	2%		
		30M	1%	300M	2%		
5M	1%	40M	1%	400M	2%	3G	10%
		50M	1%	500M	2%	4G	10%
		68M	1%	680M	5%	5G	10%
		75M	1%	750M	5%	10G	10%