

Thickfilm Resistor

CS 006 / CS 006L / CS 006C

► Resistance ranges, tolerances and TC's

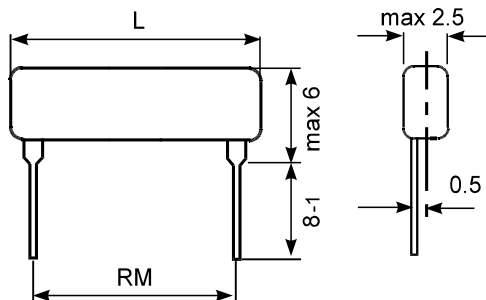
Tolerance	± 1%	± 2%	± 5%	± 10%
Resistance ranges	100K - 100M	>100M - 250M	>250M - 1G	>1G - 10G

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

► Ratings by IEC 60115-1

Thermal resistance R_{th}	max. 80 K/W		
Limited element voltage	≅ 2000 V		
Rated dissipation	P_{70} ($\vartheta_o = 125^\circ\text{C}$)	0.7 W	
	P_{40} ($\vartheta_o = 125^\circ\text{C}$)	1.0 W	
Climatic category	55 / 125 / 56		
Insulation voltage	> 500 V		
Insulation resistance	> $10^{10} \Omega$		
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. 50 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 006



	L	RM
CS 006	22,5	20,32
CS 006L	25	22,86

► Tests

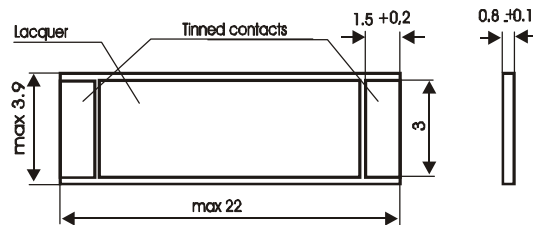
Test	Conditions	Requirements
4.13 Overload	5 s, $2,5 \times U_{rat}$ or $2 \times U_{max}$	$\Delta R \leq \pm (0.10\%R)$
4.18 Soldering-Resistance to heat	$260 \pm 5^\circ\text{C}$, 10 s	$\Delta R \leq \pm (0.10\%R)$
4.19 Rapid change of temp.	-65°C , 155°C , 5x	$\Delta R \leq \pm (0.25\%R)$
4.24 Damp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

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► Dimensions CS 106C



► Ratings by IEC 60115-1

Voltage against ambient	75 V
Mounting	Face down
Weight (100 pcs)	ca. 45 g

► Tests

	Test	Conditions	Requirements
4.13	Overload	5 s, 2,5 x U_{rat} or 2 x U_{max}	$\Delta R \leq \pm (0.10\%R)$
4.18	Soldering-Resistance to heat	260 ± 5 °C, 10 s	$\Delta R \leq \pm (0.10\%R)$
4.19	Rapid change of temp.	-65°C, 155°C, 5x	$\Delta R \leq \pm (0.25\%R)$
4.31	Substrate bending test	10x, 1mm	$\Delta R \leq \pm (0.10\%R)$
4.25	Endurance at 70 °C	U_{rat} or U_{max} 1000 h	$\Delta R \leq \pm (0.50\%R)$
		U_{rat} or U_{max} 8000 h	$\Delta R \leq \pm (1.00\%R)$

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

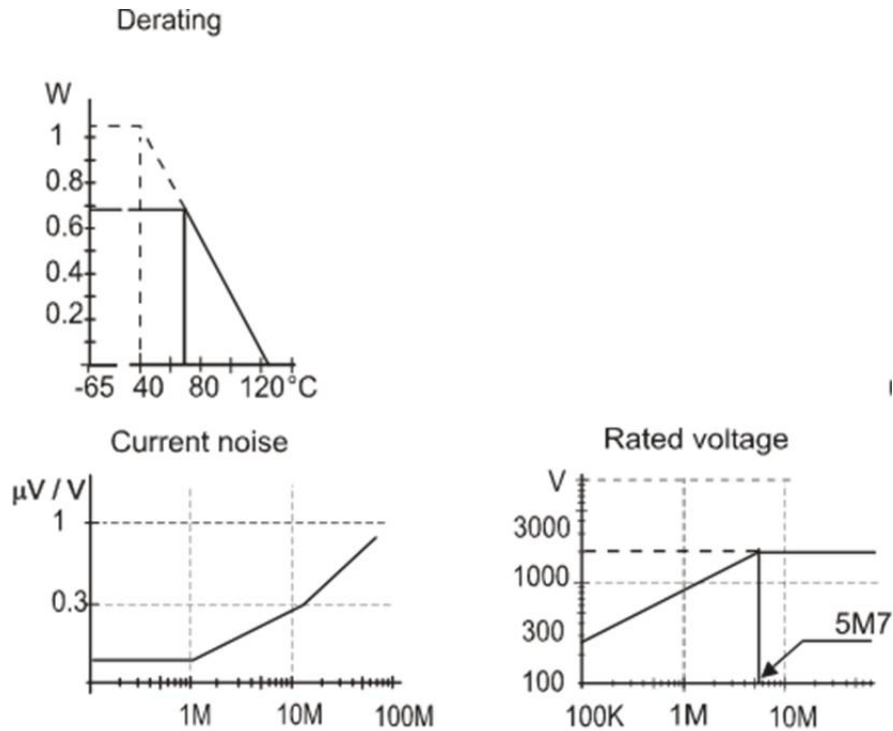
► Order examples

CS 006	250M	2%
—	—	—
type	rated resistance	tolerance
CS 006C	250M	2%
—	—	—
type	rated resistance	tolerance

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► Rating curves



► Standard Values

1M	1%	10M	1%	100M	1%	1G	5%
1M2	1%	12M	1%	120M	2%		
1M5	1%	15M	1%	150M	2%	1G5	10%
2M	1%	20M	1%	200M	2%	2G	10%
		22M	1%	220M	2%		
		25M	1%	250M	5%		
3M	1%	30M	1%	300M	5%	3G	10%
		33M	1%	330M	5%		
		39M	1%	390M	5%		
		40M	1%	400M	5%		
5M	1%	50M	1%	500M	5%	5G	10%
9M	1%	82M	1%	820M	5%	10G	10%