

Thickfilm Resistor CS 109

► Resistance ranges, tolerances and TC's

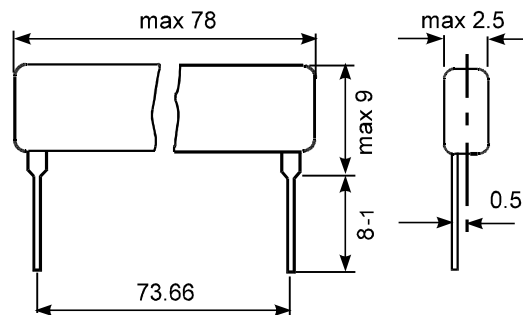
Tolerance	± 1%	± 2%	± 5%	± 10%
Resistance ranges	100K - 100M	>100M - 500M	>500M - 2G	>2G - 20G

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

► Ratings by IEC 60115-1

Thermal resistance R_{th}		max. 20 K/W
Limited element voltage		$\cong 20\,000\text{ V}$
Rated dissipation	P_{70} ($\vartheta_0 = 125\text{ °C}$)	3.0 W
	P_{40} ($\vartheta_0 = 125\text{ °C}$)	4.7 W
Climatic category		55 / 125 / 56
Insulation voltage		> 500 V
Insulation resistance		> $10^{10}\ \Omega$
Temp. characteristics		$\pm 25 \times 10^{-6} / \text{°C}$
Voltage coefficient		$< 5 \times 10^{-6} / \text{V}$
Weight (100 pcs.)		ca. 210 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 109



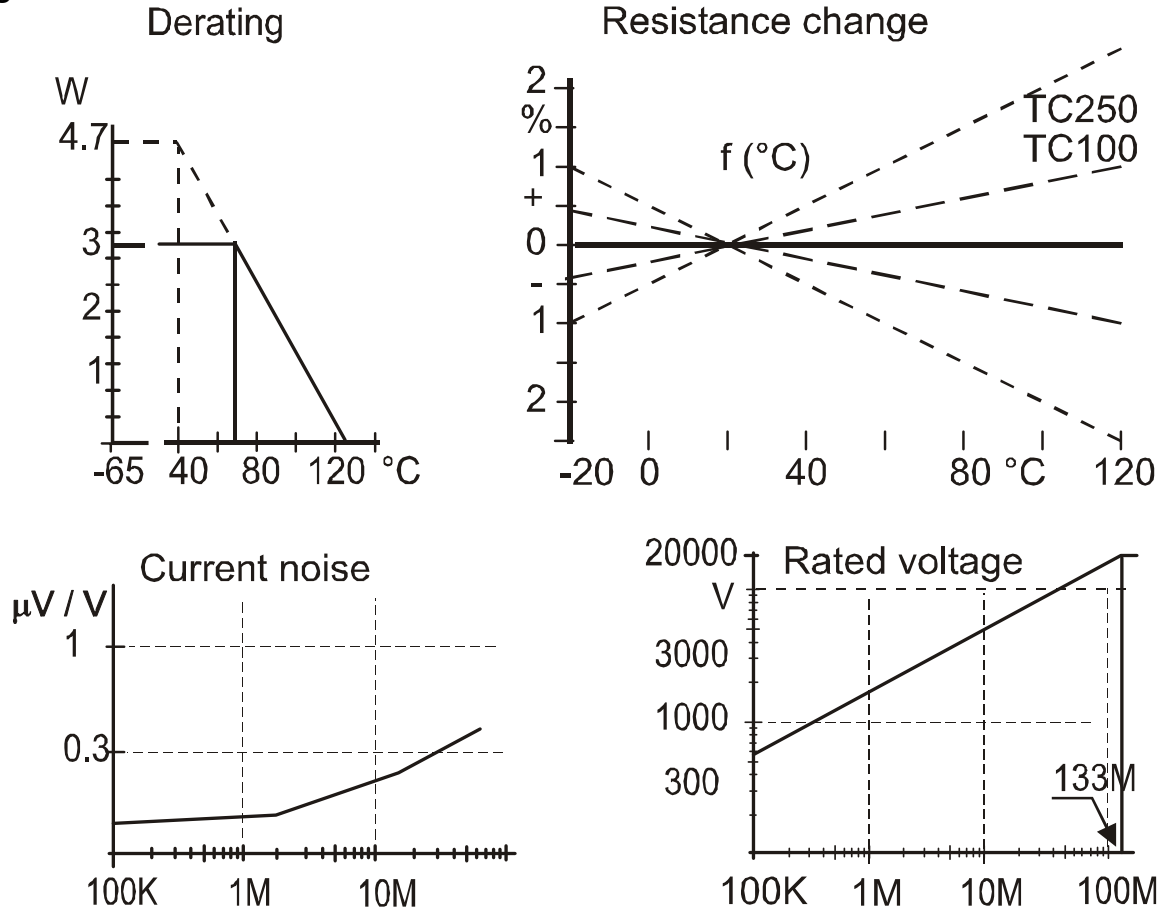
► Tests

	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	$260 \pm 5\text{ °C}$, 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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Rating curves



Order examples

CS 109 10G 10%

type rated resistance tolerance

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Rated voltage

