

Thickfilm Resistor

CS 105 / CS 105L / CS 105C

► Resistance ranges, tolerances and TC's

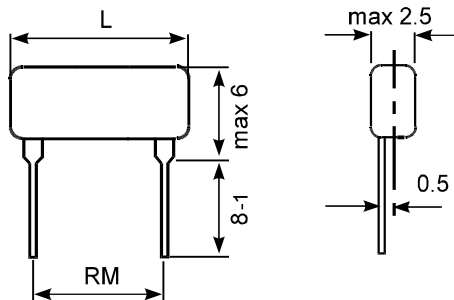
Tolerance	± 1%	± 2%	± 5%	± 10%
Resistance ranges	10K - 22M	>22M - 200M	>200M - 500M	>500M - 10G

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

► Ratings by IEC 60115-1

Thermal resistance R_{th}		max. 140 K/W
Limited element voltage		$\cong 750$ V
Rated dissipation	P_{70} ($\vartheta_0 = 125$ °C)	0.4 W
	P_{40} ($\vartheta_0 = 125$ °C)	0.6 W
Climatic category		55 / 125 / 56
Insulation voltage		> 500 V
Insulation resistance		> 10^{10} Ω
Temp. characteristics		$\pm 25 \times 10^{-6} / ^\circ\text{C}$
Voltage coefficient		$< 5 \times 10^{-6} / \text{V}$
Weight (100 pcs.)		ca. 25 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 105 / CS 105L



	L	RM
CS 005	12,5	10,16
CS 005L	15	12,7

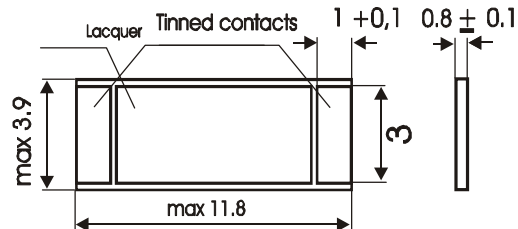
► Tests

	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 ± 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.

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► Dimensions CS 105C



► Ratings by IEC 60115-1

Voltage against ambient	75 V
Mounting	Face down
Weight (100 pcs)	ca. 22 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°C , 155°C , 5x	$\Delta R \leq \pm (0.25\%R)$
4.31	Substrat bending test	10x, 1mm	$\Delta R \leq \pm (0.10\%R)$
4.25	Endurance at $70 \text{ }^\circ\text{C}$	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 105 200M 2%
 ────┬───┬───
 type rated resistance tolerance

CS 105C/L 100M 2%
 ────┬───┬───
 type rated resistance tolerance

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► Rating curves

