

## Metalfilm Resistor BP 0207

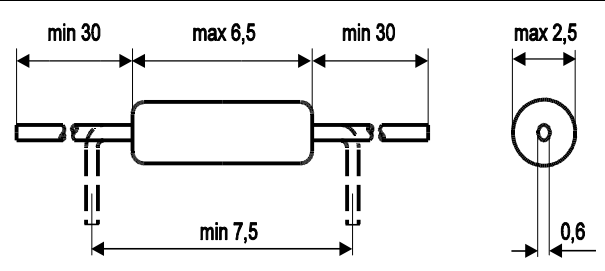
### ► Resistance ranges, tolerances and TC's

TC ( $\times 10^{-6}/^{\circ}\text{C}$ )	0.05%	0.10%	0.25%	0.50%	1%
$\pm 3$	50R - 120K	30R - 200K	30R - 200K	30R - 200K	-
$\pm 5$	50R - 250K	10R - 500K	10R - 500K	10R - 500K	-
$\pm 10$	50R - 510K	5R - 1M	5R - 1M	5R - 1M	-
$\pm 15$	50R - 510K	5R - 1M5	5R - 2M	5R - 2M	1R - 2M
$\pm 25$	50R - 510K	5R - 3M	2R - 3M	2R - 5M	1R - 5M
$\pm 50$	50R - 510K	5R - 3M	2R - 3M	2R - 10M	1R - 10M

All values within the resistance range are available.

### ► Ratings by CECC 40 101-806

### ► Dimensions

Thermal resistance $R_{th}$	max. 140 K/W	
Limited element voltage	$\cong 300\text{ V}$	
Rated dissipation	$P_{70}$ ( $\vartheta_o = 125\text{ }^{\circ}\text{C}$ ) $P_{40}$ ( $\vartheta_o = 125\text{ }^{\circ}\text{C}$ )	0.4 W 0.6 W
Insulation voltage		$> 750\text{ V}$
Insulation resistance		$> 10^{10}\ \Omega$
Temp. characteristics	$TC \geq (0 \pm 25 \times 10^{-6})$ $TC \leq (0 \pm 15 \times 10^{-6})$	- 25 °C bis 125 °C - 10 °C bis 85 °C
Voltage coefficient		$< 0,5 \times 10^{-6} / \text{V}$

### ► Characteristics

Climatic category	55 / 125 / 56
Low air pressure	min 1.0 kPa
Temp. rise at rated dissipation	$\vartheta_r \leq 55\text{K}$
Current noise	s. p. 2
Non-linearity	s. p. 2
Weight (100 pcs.)	ca. 28 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
Taping	IEC 286 part1
<i>Tape width</i> <i>Tapebandwidth</i> <i>step</i> <i>Volumes &gt; 300 pcs are taped</i>	65 mm 6 mm 5 mm
<b>Specific Products</b>	
Low inductive "N"	TC 50 0.5% 2R - 1K0 1.0% 1R - 1K2 <i>trimming by a special cut, resistance range is limited</i>
Preloaded "V"	The resistors are conditioned 100 h with rated power or rated voltage.
Sorting	A sorting into groups depending on tolerances and temperature characteristics (into the next better group) is available.

# Metalfilm Resistor

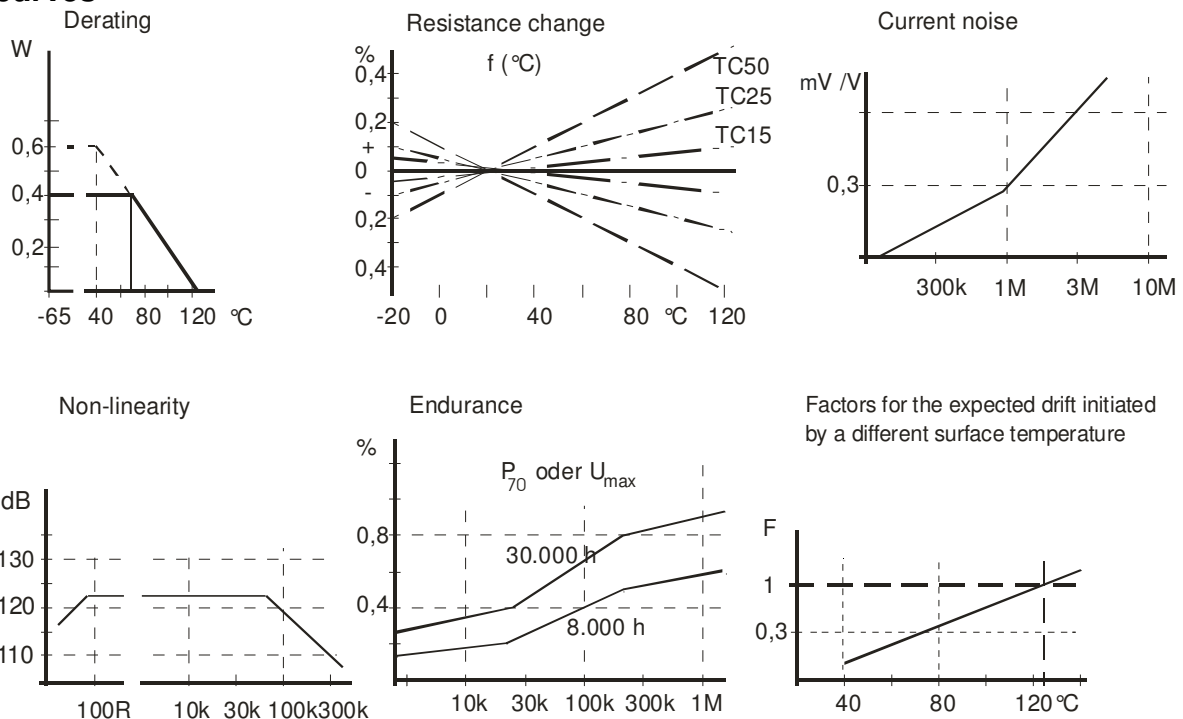
## BP 0207

### Tests

	Test	Conditions	Requirements
4.13	Overload	5 s, $2.5 \times U_{\text{rat}}$ or $2 \times U_{\text{max}}$	$\Delta R \leq \pm (0.1\%R + 0.01\Omega)$
4.17	Solderability	2 s, 230 °C	$\geq 95\%$ with solder wetting
4.16	Robustness of terminations	tensile, bending, torsion	$\Delta R \leq \pm (0.1\%R + 0.01\Omega)$
4.18	Soldering resistance to heat	$260 \pm 5$ °C, 10 s	$\Delta R \leq \pm (0.1\%R + 0.01\Omega)$
4.19	Rapid change of temp.	-65 °C, 155 °C, 5x	$\Delta R \leq \pm (0.1\%R + 0.01\Omega)$
4.23	Climatic sequence		$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$
4.24	Damp heat, steady	40 °C, 93% r.H., 56 d	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$
4.25	Endurance at 70 °C	$U_{\text{rat}}$ or $U_{\text{max}}$ 1000 h	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$
		$U_{\text{rat}}$ or $U_{\text{max}}$ 8000 h	$\Delta R \leq \pm (1\%R + 0.05\Omega)$

- Section numbers of test and performance requirements refer to IEC 60115-1.
- Test methods refer to IEC 60068-2. See also CECC 40 101-806.
- The statements regarding the requirements are based on the stability class 0.5.
- Reference measurements are to be performed at 20 °C. At low ohmic values the distance of the measuring clip has to be considered ( $24 \pm 2\text{mm}$ ). Less than 1k-Ohm should always be measured with the 4-wires-method.

### Rating curves



### Order examples

BP 0207      35K04      0,05%      TC 5

type      rated resistance      tolerance      TC