

Metalfilm Resistor BP 0207

► Resistance ranges, tolerances and TC's

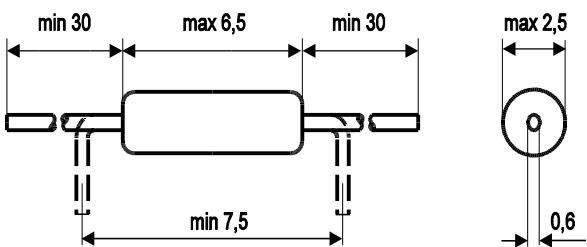
TC ($\times 10^{-6}/\text{°C}$)	0.05%	0.10%	0.25%	0.50%	1%
± 3	50R - 120K	30R - 200K	30R - 200K	30R - 200K	-
± 5	50R - 250K	10R - 500K	10R - 500K	10R - 500K	-
± 10	50R - 510K	5R - 1M	5R - 1M	5R - 1M	-
± 15	50R - 510K	5R - 1M5	5R - 2M	5R - 2M	1R - 2M
± 25	50R - 510K	5R - 3M	2R - 3M	2R - 5M	1R - 5M
± 50	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	min 30	max 6,5	min 30	max 2,5
Limited element voltage	$\geq 300 \text{ V}$				
Rated dissipation	$P_{70} (\vartheta_0 = 125 \text{ °C})$				
	$P_{40} (\vartheta_0 = 125 \text{ °C})$				
Insulation voltage	> 750 V				
Insulation resistance	$> 10^{10} \Omega$				
Temp. characteristics	$TC \geq (0 \pm 25 \times 10^{-6})$	- 25°C bis 125°C			
	$TC \leq (0 \pm 15 \times 10^{-6})$	- 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
Tape width	65 mm
Tapebandwidth	6 mm
step	5 mm
Volumes > 100 pcs are taped	
Specific Products	
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.

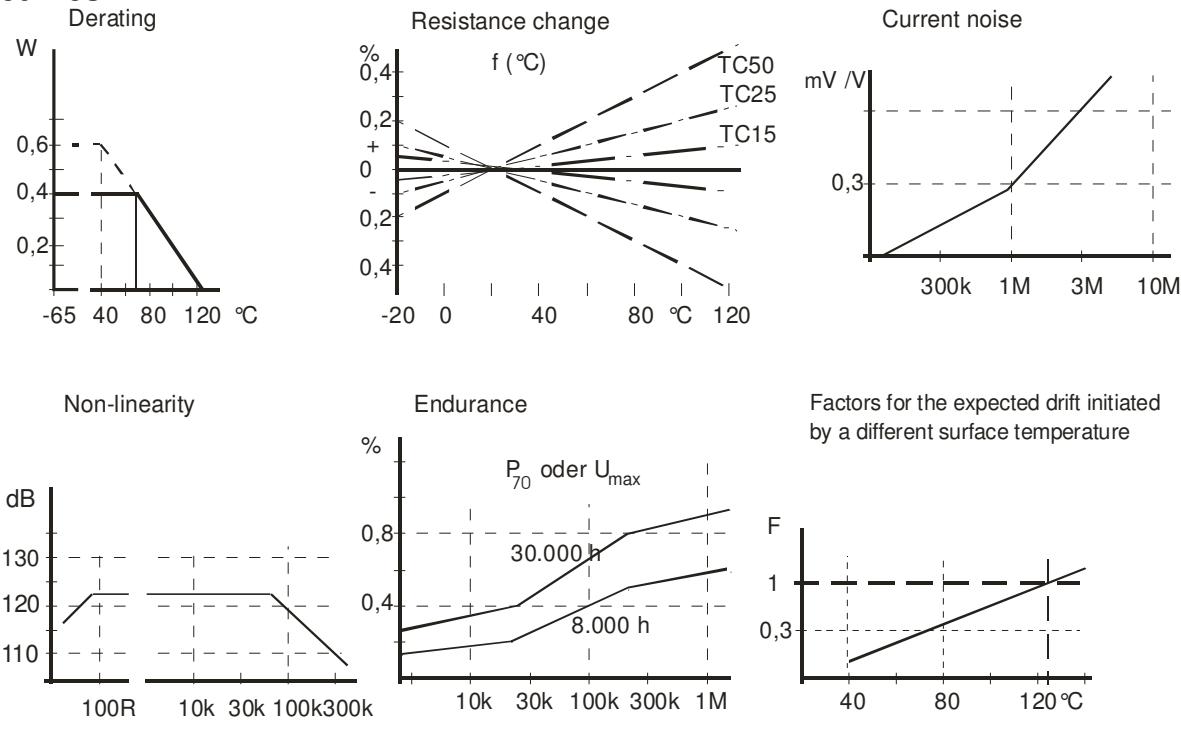
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► Tests

	Test	Conditions	Requirements
4.13	Overload	5 s, $2.5 \times U_{rat}$ or $2 \times U_{max}$	$\Delta R \leq \pm (0.1\%R + 0.01\Omega)$
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 ± 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_{rat} or U_{max} 1000 h U_{rat} or U_{max} 8000 h	$\Delta R \leq \pm (0.5\%R + 0.05\Omega)$ $\Delta R \leq \pm (1\%R + 0.05\Omega)$

- 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 ± 2 mm). Less than 1 k-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