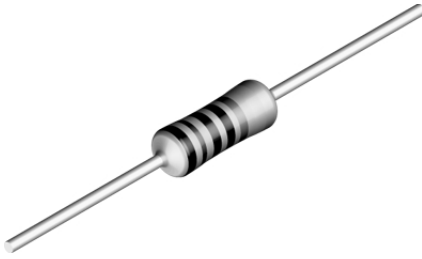


## Carbon Film Resistors, Power Type



### FEATURES

- Carbon film resistor with high power rating.
- Stable film structure on special ceramic
- Good overload and pulse withstanding characteristics
- For applications in power electronics and general purpose commercial electronics

### STANDARD ELECTRICAL SPECIFICATIONS

MODEL	POWER RATING P <sub>70°C</sub> W	LIMITING ELEMENT VOLTAGE MAX. V <sub>≅</sub>	TEMPERATURE COEFFICIENT ppm / K	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES
HCA0207	0.8	500	- 220 to - 1500	1	10R-1M0	48
				2	4R7-2M2	48
				5	4R7-2M2	24

• Coating: green

• Marking see appropriate catalog or web page

• Additional yellow dot at the beginning of the code

### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	HCA0207
Rated Dissipation at 70°C	W	0.8
Limiting Element Voltage <sup>1)</sup>	V <sub>≅</sub>	≤ 500
Max. Pulse Voltage	V <sub>≅</sub>	1050
Insulation Voltage (1 min)	V <sub>eff</sub>	≥ 700
Thermal Resistance	K/W	130
Insulation Resistance	Ω	≥ 10 <sup>10</sup>
Category Temperature Range	°C	- 55 / ± 175
Failure Rate	10 <sup>-9</sup> /h	< 20
Terminal Strength, axial	N	> 50
Weight	g	0.22

<sup>1)</sup> Rated Voltage  $\sqrt{P \times R}$

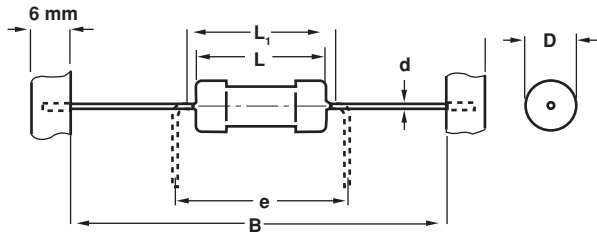
### PACKAGING

MODEL	REEL			BOX		
	PIECES / REEL	CODE	MIN. ORDER QUANTITY PACKAGING UNITS	PIECES / BOX	CODE	MIN. ORDER QUANTITY PACKAGING UNITS
HCA0207	5000	R5	1	5000	A5	1
				2000	A2	2

### ORDERING INFORMATION

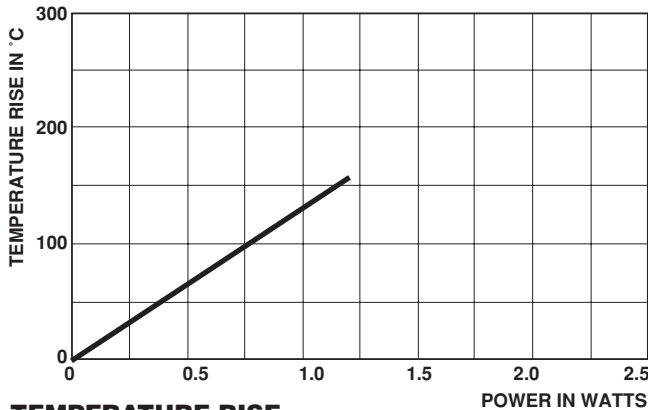
HCA0207	-	100R	2%	A5
MODEL	TC ppm / K	RESISTANCE VALUE Ω	TOLERANCE ± %	PACKAGING A5-Ammopack 5000pcs

**DIMENSIONS**

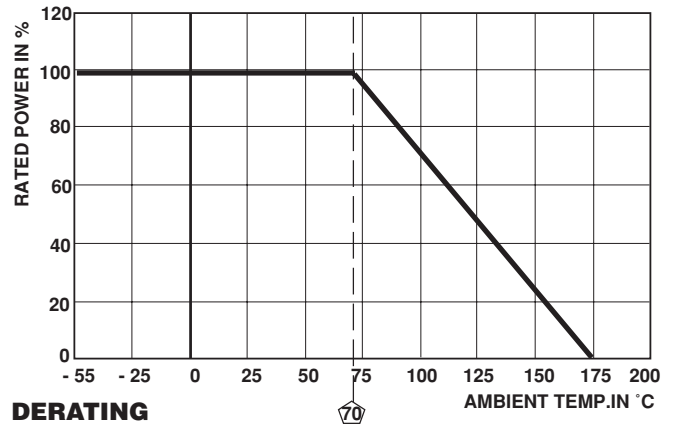


DIMENSIONS [in millimeters]						
MODEL	D max.	L	L <sub>1</sub> max	B	d	e
HCA0207	2.5 <sup>-0.3</sup>	6.3 <sup>-0.5</sup>	7.5	53 ± 1	0.6	7.5

- Taping in acc. with IEC60286-1
- D and L measured in acc. with IEC60294
- d according to IEC60301



**TEMPERATURE RISE**



**DERATING**

<b>PERFORMANCE</b>		
TEST	CONDITIONS OF TEST	REQUIREMENTS <sup>1)</sup>
Endurance 1000 hours at 70°C IEC 60115-1 4.25.1	1000 hours at 70°C, 1.5 hours "ON", 0.5 hours "OFF"	≤ ± 2.0%
Endurance at UCT IEC60115-1 4.25.3	1000 hours at 155°C without load	≤ ± 5.0%
Overload Test IEC 60115-1 4.13	Short time overload 5 seconds at 2.5 x rated voltage or ≤ twice the limiting element voltage	≤ ± 0.5%
Thermal Shock IEC 60115-1 4.19, IEC 60068-2-14	Rapid change between upper and lower category temperature	≤ ± 0.25%
Climatic Sequence IEC 60115+1 4.23	Dry heat, damp heat cyclic, cold, low air pressure	≤ ± 2.0%
Damp Heat Steady State IEC 60115-1 4.24, IEC 60068-2-3	56 days at 40°C and 93% relative humidity	≤ ± 2.0%
Resistance to Soldering Heat IEC 60115-1 4.18, IEC 60068-2-20	10 seconds at 260°C solder bath temperature	≤ ± 0.25%
Robustness of Terminations IEC 60115-1 4.16, IEC 60068-2-21	Tensile, bending and torsion	≤ ± 0.25%
Vibration IEC 60115-1 4.22	0.75mm or 10g, 10Hz-500Hz 6 hours	≤ ± 0.25%

<sup>1)</sup> For a resistance range of 10R to 1MΩ

<b>APPLICABLE SPECIFICATIONS</b>
• CECC40000 / 40100 / EN 140000 / IEC 60115-1