

Carbon Film Resistors, Standard

FEATURES

- Conformal lacquer coating
- Stable film structure
- Low performance and low cost applications
- General purpose commodity products
- Compatible with automatic insertion equipment



STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	POWER RATING $P_{70^{\circ}\text{C}}$ W	LIMITING ELEMENT VOLTAGE MAX $V_{\cong}$	TEMPERATURE COEFFICIENT ppm/K	TOLERANCE %	RESISTANCE RANGE Ω	E-SERIES
CFA0207	0207	0.33	250	+ 350/- 1500	5	1R0 - 10M	24

• Coating: beige

• Marking: 4 band colour code

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CFA0207
Rated Dissipation at 70°C	W	0.33
Limiting Element Voltage ¹⁾	$V_{\cong}$	≤ 250
Insulation voltage (1 min)	V_{eff}	> 500
Thermal Resistance	K/W	≤ 257
Insulation Resistance	Ω	≥ 10 ⁹
Category Temperature Range	°C	- 55/+ 155
Terminal Strength, axial	N	> 25
Failure Rate	10 ⁻⁹ /h	< 10
Weight	g	0.21

¹⁾Rated voltage: $\sqrt{P \times R}$

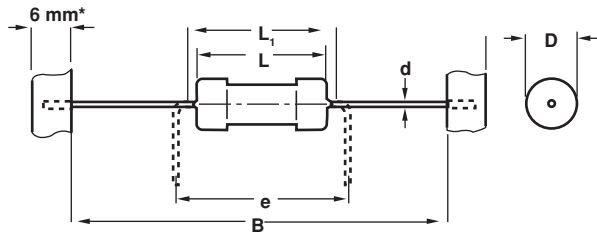
PACKAGING

MODEL	REEL ²⁾		MIN. ORDER QTY	BOX		MIN. ORDER QTY
	PIECES/REEL	CODE	PACKAGING UNITS	PIECES/BOX	CODE	PACKAGING UNITS
CFA0207	5000	R5	1	5000	A5	1

²⁾On special request only

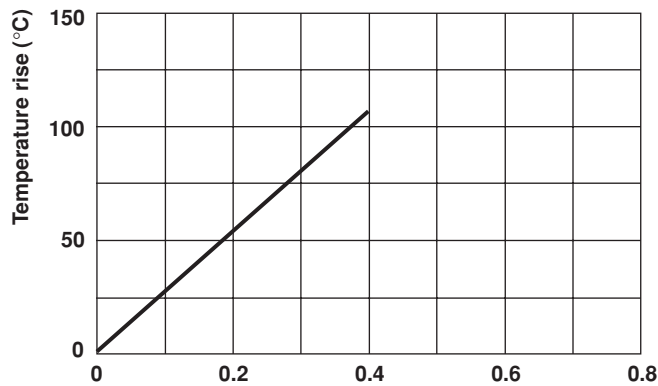
ORDERING INFORMATION

CFA0207	1K8	± 5%	A5
MODEL	RESISTANCE VALUE	TOLERANCE	PACKAGING
	Ω	%	A5-Ammopack 5000 pcs

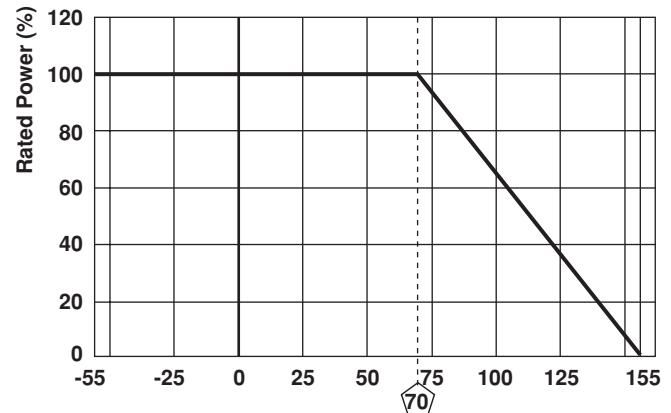
DIMENSIONS

MODEL	DIMENSIONS [in millimeters]					
	D max	L max	L ₁ max	B	d	e
CFA0207	2.5	6.5	7.5	53 ± 1	0.6	7.5

- Taping in accordance with IEC60286-1
- D and L measured in accordance with IEC60294
- d in accordance with IEC60301

**TEMPERATURE RISE**

Power (W)

**DERATING**

Ambient Temperature (°C)

PERFORMANCE

TEST	CONDITIONS OF TEST	REQUIREMENTS ¹⁾
Endurance Test at 70°C IEC 60115-1 4.25.1	1000 hours at 70°C, 1.5 hours "ON", 0.5 hours "OFF"	≤ ± 3.0%
Endurance at UCT IEC 60115-1 4.25.3	1000 hours at 155°C without load	≤ ± 3.0%
Overload Test IEC 60115-1 4.13	Short time overload 5s at 2.5 x rated voltage or ≤ twice the limiting element voltage	≤ ± 0.75%
Thermal Shock IEC 60115-1 4.19, IEC 60068-2-14	Rapid change between upper and lower category temperature	≤ ± 0.5%
Climatic Sequence IEC 60115-1 4.23	Dry heat, damp heat cyclic, cold, low air pressure	≤ ± 1.5%
Damp Heat Steady State IEC 60115-1 4.24, IEC 60068-2-3	56 days at 40°C and 93% relative humidity	≤ ± 3.0%
Resistance to Soldering Heat IEC 60115-1 4.18, IEC 60068-2-20	10 seconds at 260°C solder bath temperature	≤ ± 1.0%
Robustness of Terminations IEC 60115-1 4.16	Tensile, bending and torsion	≤ ± 0.25%
Vibration IEC 60115-1 4.22	0.75mm or 10g, 10Hz - 500Hz 6 hours	≤ ± 0.25%

¹⁾ For ohmic values between 10R and 1M

APPLICABLE SPECIFICATIONS

CECC40000/40100/EN 140000/IEC 60115-1