Wirewound Resistors, Commercial Power, Axial Lead

FEATURES

- High performance for low cost
- Auto insertable
- High temperature coating for environmental protection
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

e3

RoHS COMPLIANT

HALOGEN FREE

GREEN (5-2008)

APPLICATIONS

Kitchen appliances:

- Percolators, blenders, mixers, ranges, toasters, deep fryers

Entertainment and consumer devices:

- Radios, televisions
- Computers and power supplies

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING $P_{25\ °C}$ W	RESISTANCE RANGE (1) Ω	TOLERANCE ± %	WEIGHT (typical) g
CA0001	1.0	0.1 to 1K	5, 10	0.65
CA0002	2.0	0.1 to 1K	5, 10	0.80

Note

(1) E24 decade values are available, although others may be available upon request.

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CA HIGH VOLUME RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/°C	± 350
Short Time Overload	-	5 x rated power for 5 s
Maximum Working Voltage	V	$(P \times R)^{1/2}$
Dielectric Withstanding Voltage	V_{AC}	350
Operating Temperature Range	°C	-65 to +275
Terminal Strength (minimum)	lb	10

GLIOBAL PART NUMBER INFORMATION

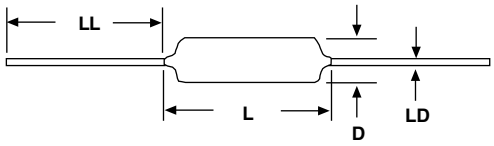
Global Part Numbering example: CA000150R00JE66

C	A	0	0	0	1	5	0	R	0	0	J	E	6	6			

GLOBAL MODEL	VALUE	TOLERANCE	PACKAGING	SPECIAL
(See Standard Electrical Specifications table/ Global Model column for options)	**R** = Decimal **K** = Thousand **R1500** = 0.15 Ω **1K000** = 1000 Ω	**J** = ± 5.0 % **K** = ± 10.0 %	**E66** = Lead (Pb)-free, tape/reel	(Dash Number) (up to 3 digits) From **1 to 999** as applicable

For technical questions, contact: ww2aresistors@vishay.com

DIMENSIONS



GLOBAL MODEL	DIMENSIONS in inches [millimeters]			
	L ± 0.040 [1.0]	D ± 0.020 [0.5]	LD ± 0.002 [0.05]	LL ± 0.079 [2.0]
CA0001	0.354 [9]	0.138 [3.5]	0.024 [0.6]	1.024 [26]
CA0002	0.453 [11.5]	0.177 [4.5]	0.031 [0.8]	1.378 [35]

MATERIAL SPECIFICATIONS

Element: Copper-nickel alloy or nickel-chrome alloy, depending on resistance value

Core: Ceramic

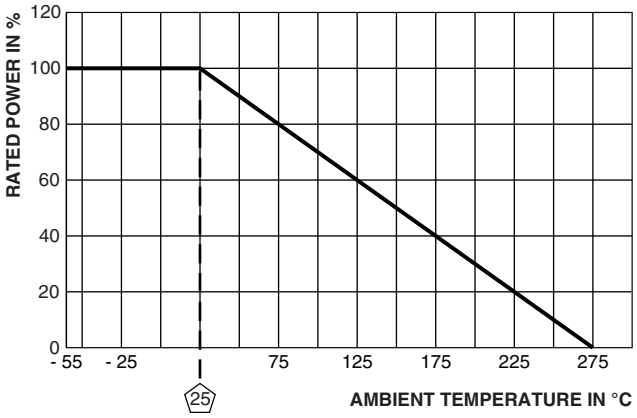
Coating: Special high temperature material

Terminals: Tin plated copper

End Caps: Tin plated steel

Part Marking: E24 color bands

DERATING



PERFORMANCE

TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal Shock	-55 °C to +275 °C, 5 cycles, 30 min dwell time	± (5.0 % + 0.05 Ω) Δ*R*
Short Time Overload	5 x rated power for 5 s	± (1.0 % + 0.05 Ω) Δ*R*
Dielectric Withstanding Voltage	350 V_{AC} for 1 min	± (2.0 % + 0.05 Ω) Δ*R*
Low Temperature Operation	-65 °C, full rated working voltage for 45 min	± (3.0 % + 0.05 Ω) Δ*R*
Humidity	75 °C, 90 % - 100 % RH, 240 h	± (5.0 % + 0.05 Ω) Δ*R*
Load Life	1000 h at rated power, +25 °C, 1.5 h “ON”, 0.5 h “OFF”	± (5.0 % + 0.05 Ω) Δ*R*
Terminal Strength	10 pounds for 30 s; body twisted about axis, 3 x 360° rotations	± (2.0 % + 0.05 Ω) Δ*R*
Resistance to Solder Heat	Terminal immersed 3.5 s in molten solder at 1/8" to 3/16" from body	± (1.0 % + 0.05 Ω) Δ*R*

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