



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## 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](http://www.vishay.com/doc?99912)



**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 $P_{25\text{ °C}}$ W	RESISTANCE RANGE <sup>(1)</sup> $\Omega$	TOLERANCE $\pm \text{ %}$	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**

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

### TECHNICAL SPECIFICATIONS

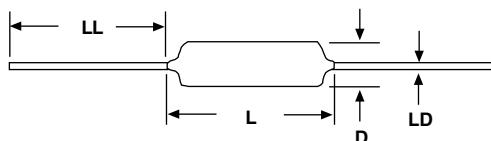
PARAMETER	UNIT	CA HIGH VOLUME RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/°C	$\pm 350$
Short Time Overload	-	5 x rated power for 5 s
Maximum Working Voltage	V	$(P \times R)^{1/2}$
Dielectric Withstanding Voltage	V <sub>AC</sub>	350
Operating Temperature Range	°C	-65 to +275
Terminal Strength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

### GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: CA000150R00JE66



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

**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

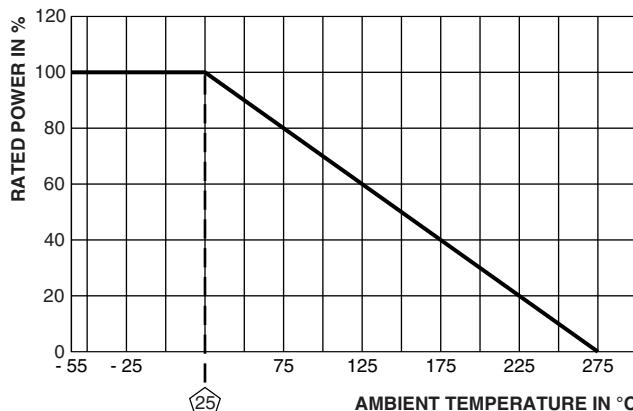
**Core:** Ceramic

**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) ΔR
Short Time Overload	5 x rated power for 5 s	± (1.0 % + 0.05 Ω) ΔR
Dielectric Withstanding Voltage	350 V <sub>AC</sub> for 1 min	± (2.0 % + 0.05 Ω) ΔR
Low Temperature Operation	-65 °C, full rated working voltage for 45 min	± (3.0 % + 0.05 Ω) ΔR
Humidity	75 °C, 90 % - 100 % RH, 240 h	± (5.0 % + 0.05 Ω) ΔR
Load Life	1000 h at rated power, +25 °C, 1.5 h "ON", 0.5 h "OFF"	± (5.0 % + 0.05 Ω) ΔR
Terminal Strength	10 pounds for 30 s; body twisted about axis, 3 x 360° rotations	± (2.0 % + 0.05 Ω) ΔR
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) ΔR

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