

CA High Volume

Vishay Dale

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

APPLICATIONS

Kitchen appliances:

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

Entertainment and consumer devices:

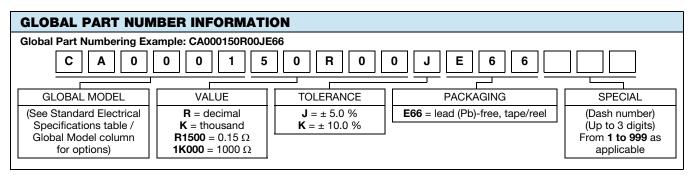
- Radios, televisions
- Computers and power supplies

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 x R) ^{1/2}		
Dielectric Withstanding Voltage	V _{AC}	350		
Operating Temperature Range	°C	-65 to +275		
Terminal Strength (Minimum)	lb	10		



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Pb-free e3



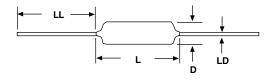
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DIMENSIONS



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

MATERIAL SPECIFICATIONS

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

Core: ceramic

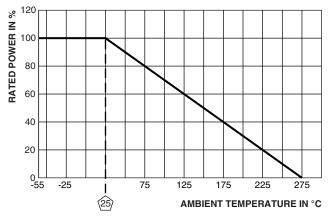
Coating: special high temperature material

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) Δ <i>R</i>		
Dielectric Withstanding Voltage	350 V _{AC} 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) Δ <i>R</i>		



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