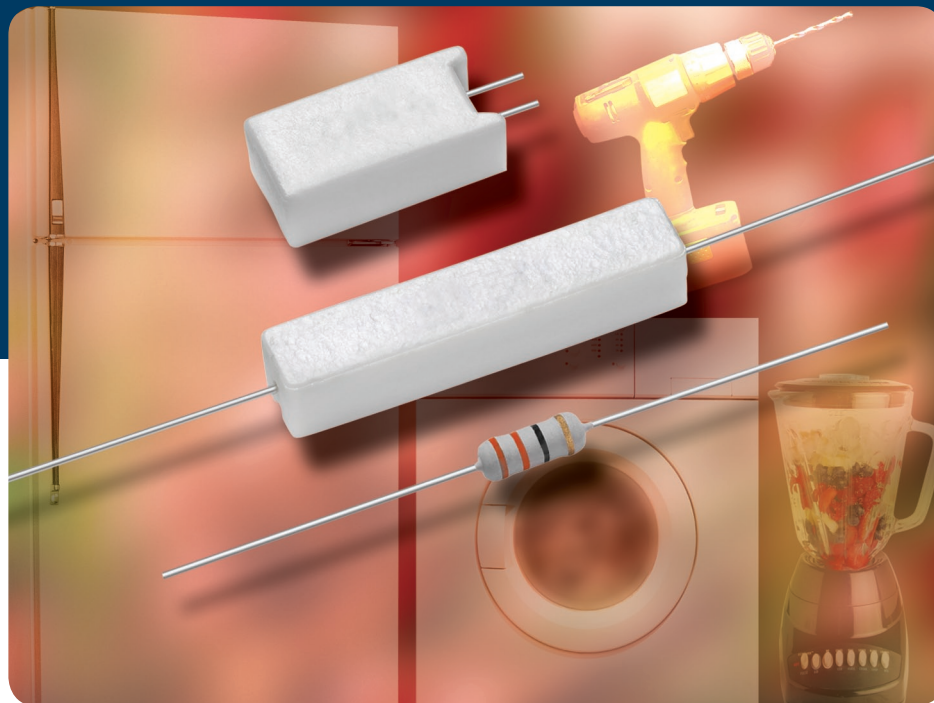




# AXIAL LEADED WIREWOUND/METAL OXIDE RESISTORS

CA High Volume, CP High Volume, and  
CPCP/CPCF High Volume



## High Volume, Low-Cost, Axial Leaded Wirewound/Metal Oxide Resistors

### KEY BENEFITS

- Low-cost wirewound/metal oxide resistors
- Fireproof construction required for UL-approved circuitry
- Wide range of wattage ratings (1 W to 20 W)
- Wide resistance value range (0.1  $\Omega$  to 50 K $\Omega$ )
- CPCP and CPCF models have vertical-mount construction for board space savings

### APPLICATIONS

- Capacitance discharge
- Pulsing applications
- High power dissipation
- Voltage dividers
- DC/DC converters

Datasheets are available on our web site at [www.vishay.com](http://www.vishay.com)  
for CA High Volume - <http://www.vishay.com/doc?30114>  
for CP High Volume - <http://www.vishay.com/doc?30113>  
for CPCP/CPCF High Volume - <http://www.vishay.com/doc?30116>

## Wirewound/Metal Oxide Resistors, Commercial Power

### Axial Lead (CP)



#### FEATURES

- High performance for low cost
- High power to size ratio
- Ceramic cases are available with circuit board stand-offs (designated with a ...3 model ending)
- Special cement potting compound and ceramic case provide high thermal conductivity in a fireproof package



RoHS COMPLIANT

Global Part Numbering Example: CP00051R00J5663

GLOBAL MODEL	POWER RATING P <sub>avg</sub> W	RESISTANCE RANGE ± 5 %, ± 10 %		WEIGHT (Typical) g
		WIREWOUND	METAL OXIDE	
CP0002	2	0.1 - 82	83 - 30 k	2.0
CP0003	3	0.1 - 180	181 - 33 k	3.4
CP0005	5	0.1 - 180	181 - 50 k	3.6
CP0005..3	5	0.1 - 180	181 - 50 k	4.8
CP0007	7	0.1 - 430	431 - 50 k	5.0
CP0007...3	7	0.1 - 430	431 - 50 k	6.8
CP0010	10	0.1 - 470	471 - 50 k	9.5
CP0010...3	10	0.1 - 470	471 - 50 k	9.9
CP0015	15	0.5 - 600	601 - 50 k	16.8
CP0020	20	0.5 - 1 k	1.1 k - 50 k	22.8

#### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	WIREWOUND CHARACTERISTICS
Temperature Coefficient	ppm/°C	± 400
Short Time Overload	-	5 x rated power for 5 seconds
Terminal Strength	lb	10 minimum
Operating Temperature Range	°C	-65/+275
Dielectric Withstanding Voltage	V <sub>AC</sub>	1000
Maximum Working Voltage	V	(P x R) <sup>1/2</sup>
Temperature Coefficient	ppm/°C	± 400
Short Time Overload	-	5 x rated power for 5 seconds
Terminal Strength	lb	10 minimum
Operating Temperature Range	°C	-65/+225
Dielectric Withstanding Voltage	V <sub>AC</sub>	1000
Maximum Working Voltage	V	(P x R) <sup>1/2</sup>

#### GLOBAL PART NUMBER INFORMATION

Global Part Numbering Example: CP00051R00J5663

C	P	0	0	5	1	5	R	0	0	J	E	6	3						
GLOBAL MODEL (See Standard Electrical Specifications Global Model column for options)				VALUE R = Decimal K = Thousand R1500 = 0.15 Ω 1K500 = 1500 Ω				TOLERANCE J = ± 5.0 % K = ± 10 %				PACKAGING E66 = Lead (Pb)-free, bulk				SPECIAL (Dash Number) (up to 3 digits) From 1-999 as applicable			

### Axial Lead (CA)



#### FEATURES

- High performance for low cost
- Auto insertable
- High temperature coating for environmental protection



RoHS COMPLIANT

#### STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING P <sub>avg</sub> W	RESISTANCE RANGE ± 5 %, ± 10 %	WEIGHT (Typical) g
CA0001	1.0	0.1 - 1 k	0.66
CA0002	2.0	0.1 - 1 k	0.80

#### GLOBAL PART NUMBER INFORMATION

Global Part Numbering Example: CA00015R00J66

C	A	0	0	1	5	0	R	0	0	J	E	6	6						
GLOBAL MODEL (See Standard Electrical Specifications Global Model column for options)				VALUE R = Decimal K = Thousand R1500 = 0.15 Ω 1K500 = 1500 Ω				TOLERANCE J = ± 5.0 % K = ± 10 %				PACKAGING E66 = Lead (Pb)-free, tape/reel				SPECIAL (Dash Number) (up to 3 digits) From 1-999 as applicable			

### Vertical Mount (CPCG, CPCF)



#### FEATURES

- Space saving
- Direct mounting on printed circuit board
- High power to size ratio
- Special cement potting compound and ceramic case provide high thermal conductivity in a fireproof package



RoHS COMPLIANT

#### STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING P <sub>avg</sub> W	RESISTANCE RANGE ± 5 %, ± 10 %	TECHNOLOGY	WEIGHT (Typical) g
CPCG02	2	0.1 - 100	Wirewound	4.7
CPCF02	2	101 - 10 k	Metal Oxide	4.7
CPCG03	3	0.1 - 180	Wirewound	5.5
CPCF03	3	181 - 50 k	Metal Oxide	5.5
CPCG05	5	0.1 - 180	Wirewound	6.9
CPCF05	5	181 - 50 k	Metal Oxide	6.9
CPCG07	7	0.1 - 430	Wirewound	9.2
CPCF07	7	431 - 47 k	Metal Oxide	9.2
CPCG10	10	0.1 - 470	Wirewound	14.3

#### GLOBAL PART NUMBER INFORMATION

Global Part Numbering Example: CPCG051R00J66

C	P	C	0	5	1	5	R	0	0	J	E	6	6						
GLOBAL MODEL (See Standard Electrical Specifications Global Model column for options)				VALUE R = Decimal K = Thousand R1500 = 0.15 Ω 1K500 = 1500 Ω				TOLERANCE J = ± 5.0 % K = ± 10 %				PACKAGING E66 = Lead (Pb)-free, bulk				SPECIAL (Dash Number) (up to 3 digits) From 1-999 as applicable			

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