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!

Contact us

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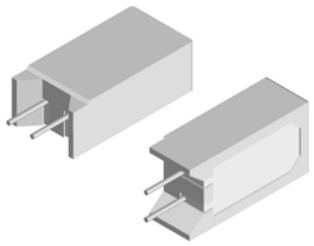
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Wirewound/Metal Oxide Resistors, Commercial Power, Vertical Mount



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
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

e3

RoHS COMPLIANT

HALOGEN FREE GREEN (5-2008)

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING $P_{40\,°C}$ W	RESISTANCE RANGE Ω WIREWOUND	RESISTANCE RANGE Ω METAL OXIDE	TOLERANCE ± %	WEIGHT (typical) g
CPCC02	2	0.1 to 100	n/a	5, 10	4.7
CPCF02	2	NA	101 to 50K	5, 10	4.7
CPCC03	3	0.1 to 100	n/a	5, 10	5.5
CPCF03	3	NA	101 to 50K	5, 10	5.5
CPCC05	5	0.1 to 100	n/a	5, 10	6.9
CPCF05	5	NA	101 to 50K	5, 10	6.9
CPCC07	7	0.1 to 100	n/a	5, 10	9.2
CPCF07	7	NA	101 to 50K	5, 10	9.2
CPCC10	10	0.1 to 100	n/a	5, 10	14.3
CPCC1A	10	0.1 to 100	n/a	5, 10	13.2

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CPCC, CPCF HIGH VOLUME RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/°C	± 400
Short Time Overload	-	5 x rated power for 5 s
Maximum Working Voltage	V	$(P \times R)^{1/2}$
Operating Temperature Range	°C	-65 to +275 for wirewound, -65 to +225 for metal oxide
Terminal Strength	lb	10 minimum
Dielectric Withstanding Voltage	V_{AC}	1000

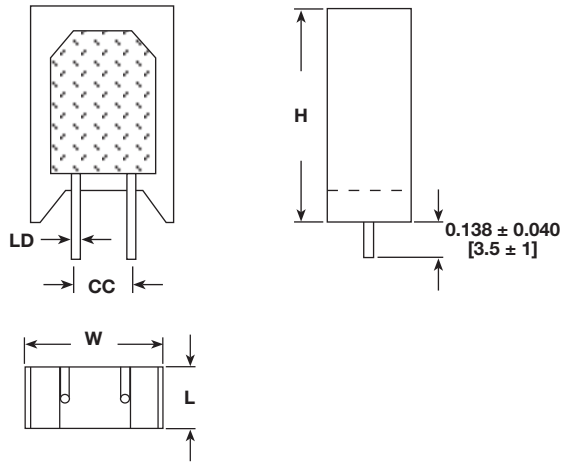
GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: CPCC0515R00JE66

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

GLOBAL MODEL	VALUE	TOLERANCE	PACKAGING	SPECIAL
(See Standard Electrical Specifications Global Model column for options)	**R** = decimal **K** = thousand **R1500** = 0.15 Ω **1K500** = 1500 Ω	**J** = ± 5.0 % **K** = ± 10.0 %	**E66** = lead (Pb)-free bulk pack	(Dash number) (up to 3 digits) From **1 to 999** as applicable

DIMENSIONS in inches [millimeters]



GLOBAL MODEL	DIMENSIONS in inches [millimeters]				
	H ± 0.060 [1.5]	W ± 0.040 [1.0]	L ± 0.040 [1.0]	LD ± 0.002 [0.05]	CC + 0.08 / - 0.04 [+ 2 / - 1]
CPCC02	0.787 [20]	0.433 [11]	0.138 [3.5]	0.031 [0.8]	0.197 [5]
CPCF02	0.787 [20]	0.433 [11]	0.138 [3.5]	0.031 [0.8]	0.197 [5]
CPCC03	0.984 [25]	0.472 [12]	0.315 [8]	0.031 [0.8]	0.197 [5]
CPCF03	0.984 [25]	0.472 [12]	0.315 [8]	0.031 [0.8]	0.197 [5]
CPCC05	0.984 [25]	0.512 [13]	0.354 [9]	0.031 [0.8]	0.197 [5]
CPCF05	0.984 [25]	0.512 [13]	0.354 [9]	0.031 [0.8]	0.197 [5]
CPCC07	1.535 [39]	0.512 [13]	0.354 [9]	0.031 [0.8]	0.197 [5]
CPCF07	1.535 [39]	0.512 [13]	0.354 [9]	0.031 [0.8]	0.197 [5]
CPCC10	1.378 [35]	0.630 [16]	0.472 [12]	0.031 [0.8]	0.295 [7.5]
CPCC1A	2.008 [51]	0.512 [13]	0.394 [10]	0.029 [0.75]	0.197 [5]

MATERIAL SPECIFICATIONS

Part Marking: Dale, model, wattage, value, tolerance, date code

CPCC

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

Core: alumina ceramic

Body: steatite ceramic case with cement potting compound

End Caps: tin plated steel

Terminals: tinned copper

CPCF

Element: nickel oxide

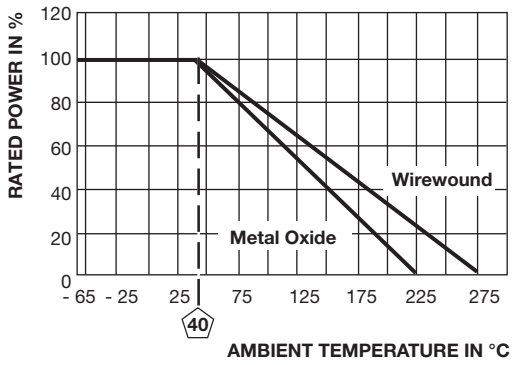
Core: alumina ceramic

Body: steatite ceramic case with inorganic potting compound

End Caps: brass alloy

Terminals: tinned copper

DEARATING



PERFORMANCE

TEST	CONDITIONS OF TEST	CPCC, CPCF TEST LIMITS
Thermal Shock	-55 °C to +275 °C (+225 °C for metal oxide), 5 cycles, 30 min dwell time	± (5.0 % + 0.05 Ω) ΔR
Short Time Overload	5 x rated power for 5 s	± (4.0 % + 0.05 Ω) ΔR
Dielectric Withstanding Voltage	1000 V_{RMS} 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
Bias Humidity	75 °C, 90 % to 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”	± (10.0 % + 0.05 Ω) ΔR
Terminal Strength	5 s to 10 s 10 pound pull test	± (2.0 % + 0.05 Ω) ΔR
Resistance to Solder Heat	Terminal immersed 3.5 s in molten solder up to body	± (4.0 % + 0.05 Ω) ΔR

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