Wirewound Resistors, Commercial Power, Current Sense, Low Value

FEATURES

- Open air design
- Complete welded construction
- Low temperature coefficient
- Extremely low resistance values
- Low inductance
- AEC-Q200 qualified available (1)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available

e3

RoHS* Available

HALOGEN FREE Available

GREEN (5-2008) Available

Notes

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant.
Please see the information / tables in this datasheet for details

(1) Flame retardance test may not be applicable to some resistor technologies

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING $P_{70\,°C}$ W	RESISTANCE VALUE (1) Ω	TOLERANCE ± %	WEIGHT (typical) g
CP0002...13	1	0.005 to 0.03	1, 5	0.2

Note

(1) Other values available, contact factory

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	CP0002...13
Temperature Coefficient	ppm/°C	Element = ± 25; Component = ± 140
Operating Temperature	°C	-55 to +275

GLOBAL PART NUMBER INFORMATION

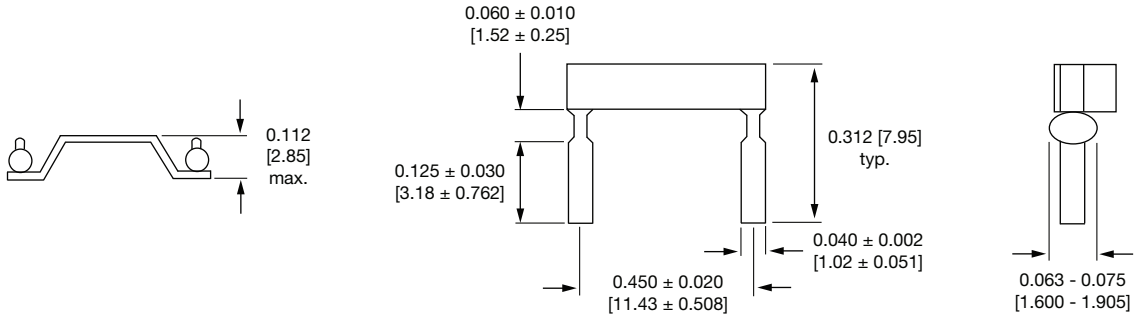
Global Part Numbering Example: CP00026L800FE5113

C	P	0	0	0	2	6	L	8	0	0	F	E	5	1	1	3	

GLOBAL MODEL	VALUE	TOLERANCE CODE	PACKAGING	SPECIAL
CP0002	**L** = mΩ (below 0.01 Ω) **R** = decimal **5L000** = 0.005 Ω **R0100** = 0.01 Ω	**F** = ± 1.0 % **J** = ± 5.0 %	**E51** = lead (Pb)-free, bulk **S51** = tin / lead, bulk	**13**

For technical questions, contact: ww2aresistors@vishay.com

DIMENSIONS in inches [millimeters]



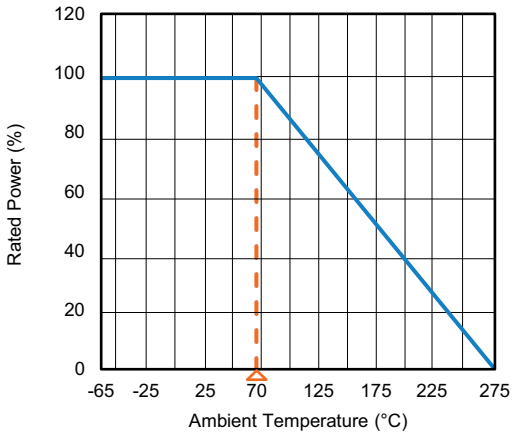
MECHANICAL SPECIFICATIONS

Terminal Strength: 10 pounds minimum

Construction: a completely welded assembly using a premium quality copper-nickel element and tinned copper terminals.

Packaging: layered bulk packaging, 2000 pcs/bag sealed

DERATING



PERFORMANCE		
TEST	**CONDITIONS OF TEST**	**TEST LIMITS**
Thermal Shock	-55 °C to +150 °C, 1000 cycles, 15 min at each extreme	± (0.5 % + 0.0005 Ω) Δ*R*
Short Time Overload	5 x rated power for 5 s	± (0.5 % + 0.0005 Ω) Δ*R*
Low Temperature Operation	-65 °C for 24 h	± (0.5 % + 0.0005 Ω) Δ*R*
High Temperature Exposure	1000 h at +170 °C	± (1.0 % + 0.0005 Ω) Δ*R*
Bias Humidity	+85 °C, 85 % RH, 10 % bias, 1000 h	± (0.5 % + 0.0005 Ω) Δ*R*
Mechanical Shock	100 *g*'s for 6 ms, 5 pulses	± (0.5 % + 0.0005 Ω) Δ*R*
Vibration	Frequency varied 10 Hz to 2000 Hz in 1 min, 3 directions, 12 h	± (0.5 % + 0.0005 Ω) Δ*R*
Load Life	1000 h at rated power, +70 °C, 1.5 h "ON", 0.5 h "OFF"	± (1.0 % + 0.0005 Ω) Δ*R*
Resistance to Solder Heat	+260 °C solder, 10 s to 12 s dwell, 25 mm/s emergence	± (0.5 % + 0.0005 Ω) Δ*R*
Moisture Resistance	MIL-STD-202, method 106, 0 % power, 7a and 7b not required	± (0.5 % + 0.0005 Ω) Δ*R*

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