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)
- Compliant to RoHS Directive 2002/95/EC

Pb-free Available

e3

RoHS* COMPLIANT

GREEN (5-2008)** Available

Note
(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 (2) Ω	TOLERANCE ± %	WEIGHT (Typical) g
CP0002...13	1	0.005 to 0.03	1	0.2

Note
(2) 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

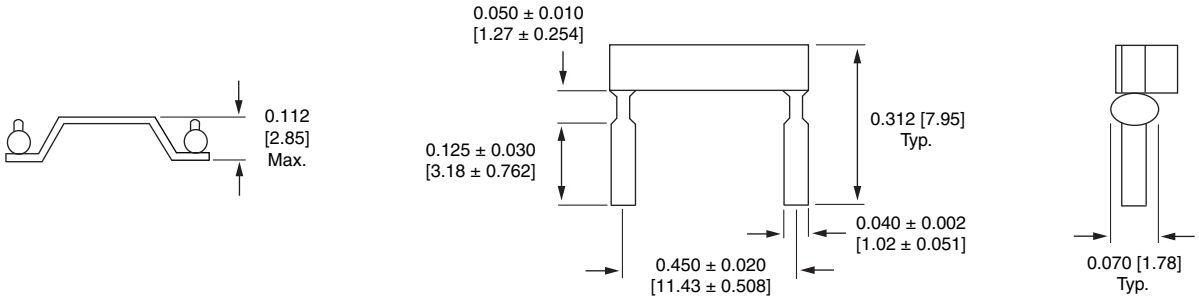
Global Part Numbering example: CP00026L800FE5113

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	(Dash number) (up to 3 digits) From **1 to 999** as applicable

* Pb containing terminations are not RoHS compliant, exemptions may apply
** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

DIMENSIONS [in millimeters]



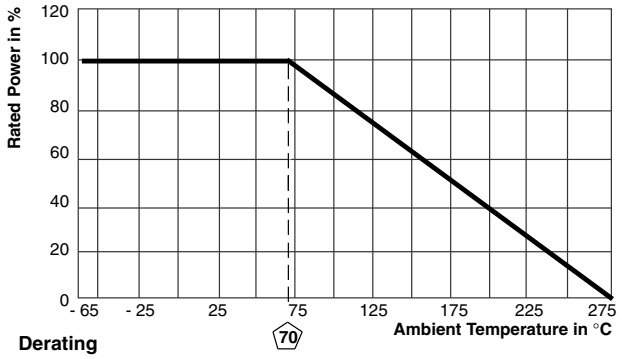
MECHANICAL SPECIFICATIONS

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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