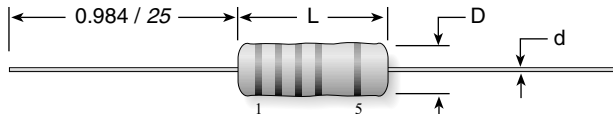


WL Series

Miniature Wirewound Current Sense



Type	Power Rating (watts)	Resistance Range (Ω)	Dim. L (mm/in)	Dim. D (mm/in)	Dim. d (mm/in)
WLA	0.5	0.005-0.100	5.08 / 0.200	2.54 / 0.100	0.60 / 0.024
WLB	1	0.005-0.100	7.00 / 0.276	3.00 / 0.120	0.60 / 0.024
WLC	2	0.010-0.100	11.4 / 0.450	6.86 / 0.270	0.80 / 0.031

PERFORMANCE CHARACTERISTICS

Test	Conditions Of Test	Performance
Thermal Shock	Rated power applied until thermal stability, -55°C +0°C, -5°C, 15min.	±2.0%
Short-time Overload	5 times rated wattage for 5 seconds	±2.0%
Solderability	Method 208 of MIL-STD-202	±2.0%
Terminal Strength	Pull test: 10 pounds, 5 to 10 seconds, Twist test: 1080°, 5 second/rotation	±1.0%
Dielectric Withstanding Voltage	500 Volts rms for 1W. 1 minute	±1.0%
High Temperature Exposure	Exposed to an ambient temperature of 275 +5/-0°C for 250 ±8 hours,	±5.0%
Moisture Resistance	MIL-STD-202 Method 106, 7b not applicable	±2.0%
Low Temperature Storage	Cold chamber at a temperature of -65 ±2°C for 24 ±4 hours	±2.0%
Vibration, High Frequency	Frequency varied 10 to 2000Hz, 200G peak, 2 directions 6 hours each	±1.0%
Load Life	1000/2000 hours at rated power, +25°C, 1.5 hours "On", 0.5 hours "Off"	±5.0%

ORDERING INFORMATION

RoHS compliant

W L A R 0 1 0 F E - T

Series	Power	Ohms	Tolerance	Package
A = 0.5	B = 1	C = 2	F = 1%	T = Tape
			J = 5%	blank = 25pc Pack

KEY TO FIVE-BAND CODE

Band	1	2	3	4	5
Color	Digit	Digit	Digit	Multiplier	Tolerance
Black	0	0	0	x 1 Ω	
Brown	1	1	1	x 10 Ω	± 1% (F)
Red	2	2	2	x 100 Ω	± 2% (G)
Orange	3	3	3	x 1K Ω	
Yellow	4	4	4	x 10K Ω	
Green	5	5	5	x 100K Ω	± 0.5% (D)
Blue	6	6	6	x 1M Ω	± 0.25% (C)
Violet	7	7	7	x 10M Ω	± 0.10% (B)
Grey	8	8	8		± 0.05%
White	9	9	9	x 0.001 Ω	
Gold				x 0.1 Ω	± 5% (J)
Silver				x 0.01 Ω	± 10% (K)

FEATURES

- Ultra-low ohmic value series for Current Sensing applications
- Very low inductance (<1nH at 1MHz Test)
- Miniaturized dimensions, Better power to dimension ratios
- Use of the highest quality standard (96% Alumina) ceramic core
- Manufacturing process—Wire winding/Spot Welding—by Computer Numerical Control (CNC) machine tools to ensure consistency of product quality.
- Encapsulated by epoxy molding compound
- Advanced IC encapsulation mold/die technologies

SPECIFICATIONS

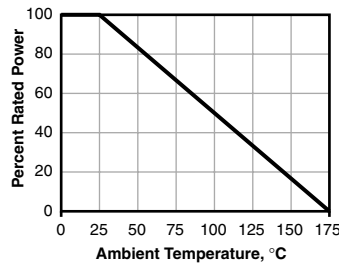
Material
Ceramic Core: CeramTec Rubalit® 96% alumina
End Caps: Stainless steel, precision formed
Leads: Copper wire, 100% Sn (Lead Free) coated
CN49W alloy resistance wire TC ±20ppm/°C
Encapsulation: SUMICON 1100/1200 Epoxy molding compound for IC encapsulation

Electrical
Standard Tolerance: F (1.0%), J (5.0%)

Temperature Coefficient (ppm/°C):
 ±300ppm/°C for ≤0.03 Ω
 ±100ppm/°C for ≥0.033 Ω

Maximum Working Voltage:
 $\sqrt{P \times R}$

DERATING



STANDARD PART NUMBERS FOR WL SERIES

Wattage: Series:	0.5 WLA	1.0 WLB	2.0 WLC
Ohms			
0.005	WLA R005FE	WLB R005FE	WLC R01FE
0.01	WLA R01FE	WLB R01FE	WLC R015FE
0.015	WLA R015FE	WLB R015FE	WLC R02FE
0.02	WLA R02FE	WLB R02FE	WLC R02FE
0.025	WLA R025FE	WLB R025FE	WLC R025FE
0.03	WLA R03FE	WLB R03FE	WLC R03FE
0.05	WLA R05FE	WLB R05FE	WLC R05FE
0.10	WLA R10FE	WLB R10FE	WLC R10FE

Check product availability at www.ohmite.com

To see the latest in resistor technology click on the "What's New" tab at ohmite.com