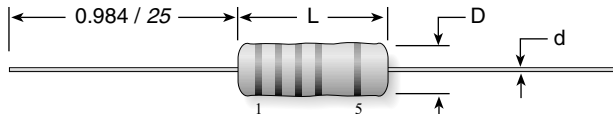


WL Series

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% J = 5%	T = Tape 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

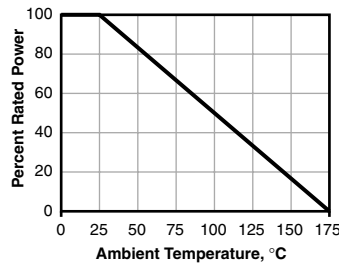
Material
Ceramic Core: CeramTec Rubalit® 96% alumina
End Caps: Stainless steel, precision formed
Leads: Copper wire, 100% Sn (Lead Free) coated
CN49W alloy resistance wire TC ±20ppm/°C
Encapsulation: SUMICON 1100/1200 Epoxy molding compound for IC encapsulation

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:	0.5	1.0	2.0
Series:	WLA	WLB	WLC
Ohms			
0.005	WLAR005FE	WLBR005FE	WLCR01FE
0.01	WLAR01FE	WLBR01FE	WLCR015FE
0.015	WLAR015FE	WLBR015FE	WLCR02FE
0.02	WLAR02FE	WLBR02FE	WLCR025FE
0.025	WLAR025FE	WLBR025FE	WLCR03FE
0.03	WLAR03FE	WLBR03FE	WLCR05FE
0.05	WLAR05FE	WLBR05FE	WLCR10FE
0.10	WLAR10FE	WLBR10FE	

Check product availability at www.ohmite.com

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