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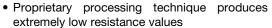


Power Metal Strip[®] Meter Shunt Resistor, Very Low Value (down to 0.0001 Ω)



FEATURES

- High power to resistor size ratio
- 5-terminal connection design
- Use for single or multi-phase energy meters





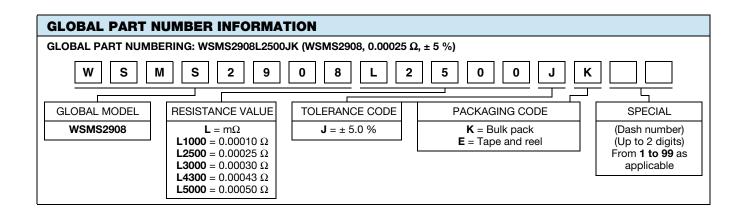
- All welded construction
- Very low inductance (< 5 nH)
- Low thermal EMF (< 3 μV/°C)
- Compliant to RoHS directive 2002/95/EC

STANDARD ELECTRICAL SPECIFICATIONS									
GLOBAL MODEL	SIZE	POWER RATING P _{70 °C} W	TOLERANCE %	RESISTANCE VALUE RANGE Ω	RESISTANCE VALUES CURRENTLY AVAILABLE $^{(1)}$ Ω	WEIGHT (typical) g/1000 pieces			
WSMS2908	2908	3.0	5.0	50μ to 1000μ	100μ, 250μ, 300μ, 430μ, 500μ	2100			

Note

(1) Other values may be available, contact factory

TECHNICAL SPECIFICATIONS						
PARAMETER	UNIT	RESISTOR CHARACTERISTICS				
Temperature Coefficient	ppm/°C	\pm 500 for 100 $\mu\Omega,$ \pm 225 for 250 $\mu\Omega,$ \pm 175 for 300 $\mu\Omega,$ 430 $\mu\Omega,$ and 500 $\mu\Omega$				
Operating Temperature Range	°C	- 65 to + 170				
Maximum Current Rating	А	(P/R) ^{1/2}				



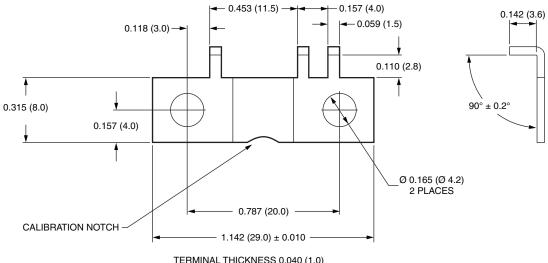
^{**} Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902



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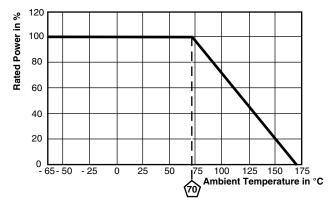
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DIMENSIONS in inches (millimeters)



TERMINAL THICKNESS 0.040 (1.0) ALL VALUES

DERATING



TOLERANCES ON DECIMALS XXX \pm 0.005

RESISTANCE VALUE (μΩ)	RESISTOR ELEMENT THICKNESS (inches)	ELEMENT LENGTH	ELEMENT MATERIAL
100	0.040	0.080	Mn-Cu
250	0.059	0.276	Mn-Cu
300	0.051	0.276	Mn-Cu
430	0.038	0.315	Mn-Cu
500	0.033	0.315	Mn-Cu

PERFORMANCE						
TEST	CONDITIONS OF TEST	TEST LIMITS				
Thermal Shock	- 55 °C to + 150 °C, 1000 cycles, 15 min at each extreme	± 0.5 % ΔR				
Short Time Overload	5 x rated power for 5 s	± 0.5 % ΔR				
Low Temperature Operation	- 65 °C for 45 min	± 0.5 % ΔR				
High Temperature Exposure	1000 h at + 170 °C	± 1.0 % ΔR				
Bias Humidity	+ 85 °C, 85 % RH, 10 % bias, 1000 h	± 0.5 % ΔR				
Mechanical Shock	100 g's for 6 ms, 5 pulses	± 0.5 % ΔR				
Vibration	Frequency varied 10 Hz to 2000 Hz in 1 min, 3 directions, 12 h	± 0.5 % ΔR				
Load Life	1000 h at + 70 °C, 1.5 h "ON", 0.5 h "OFF"	± 1.0 % ΔR				
Moisture Resistance	MIL-STD-202, method 106, 0 % power, 7b not required	± 0.5 % ΔR				



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