Vishay Dale



Power Metal Strip® Battery Shunt Resistor, Very Low Value (100 μΩ, 125 μΩ, and 250 μΩ)



FEATURES

- High power to resistor size ratio
- Proprietary processing technique produces extremely low resistance values
- All welded construction
- Very low inductance (< 5 nH)
- Low thermal EMF (< 3 μ V/°C)
- Compliant to RoHS directive 2002/95/EC



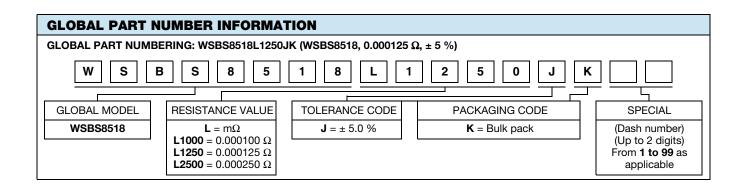
RoHS
COMPLIANT
GREEN
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STANDARD ELECTRICAL SPECIFICATIONS									
GLOBAL MODEL	SIZE	POWER RATING P _{70 °C} W	TOLERANCE %	RESISTANCE VALUE RANGE Ω	RESISTANCE VALUES CURRENTLY AVAILABLE $^{(1)}$ Ω	WEIGHT (typical) g/1000 pieces			
WSBS8518	8518	36	5.0	50μ to 1000μ	100μ, 125μ, 250μ	46 300			

Note

(1) Other values may be available, contact factory

TECHNICAL SPECIFICATIONS					
PARAMETER	UNIT	RESISTOR CHARACTERISTICS			
Temperature Coefficient	ppm/°C	± 225			
Operating Temperature Range	°C	- 65 to + 170			
Maximum Current Rating	А	(P/R) ^{1/2}			



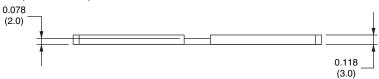
^{**} Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

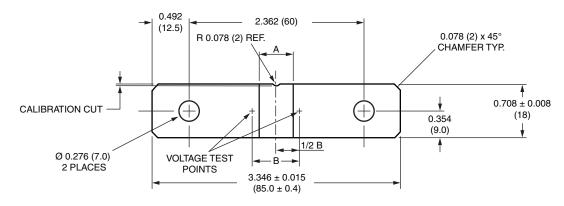


Power Metal Strip® Battery Shunt Resistor, Very Low Value (100 $\mu\Omega$, 125 $\mu\Omega$, and 250 $\mu\Omega$)

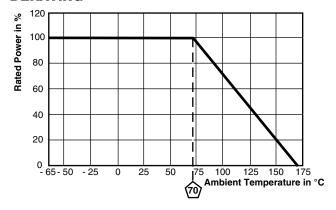
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DIMENSIONS in inches (millimeters)





DERATING



TOLERANCES ON DECIMALS XXX ± 0.005

UNLESS OTHERWISE LISTED

RESISTANCE VALUE (μΩ)	ELEMENT MATERIAL	DIMENSION A (inches)	DIMENSION B (inches)
100	Mn-Cu	0.37	0.495 ± 0.005
125	Mn-Cu	0.48	0.605 ± 0.005
250	Mn-Cu	0.90	1.025 ± 0.005

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			



Legal Disclaimer Notice

Vishay

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Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

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