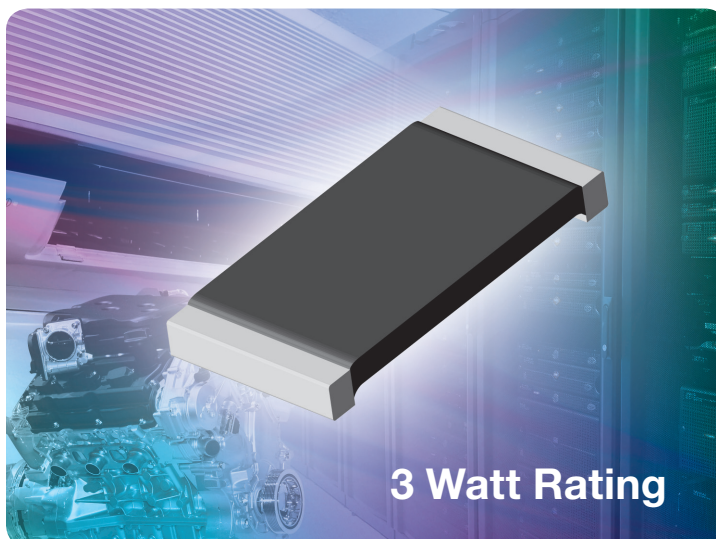


POWER METAL STRIP® RESISTORS

WSLP2512

Power Metal Strip Resistors, Very High Power (3 W) Low Value (Down to 0.0005 Ω), Surface Mount




KEY BENEFITS

- The WSLP2512 resistor has 3 W power capability in 2512 package size
- Very low resistance values (0.0005 Ω to 0.01 Ω)

APPLICATIONS

- Automotive
 - Electronic controls (including engine controls, climate controls, anti-lock brakes, etc.)
 - Brushless DC motor controls (including electronic power steering, electric water pump, oil pump, and air-conditioning)
 - Electric and hybrid controls (battery management)
- Computer
 - DC/DC converters, VRMs for servers
 - Li-Ion battery management/safety
- Industrial
 - Oil/gas well drilling (down hole test/measurement equipment)
 - Air-conditioning/heat pump (inverter control)
- Consumer
 - Air-conditioning/heat pump (inverter control)
 - White goods (inverter control)

RESOURCES

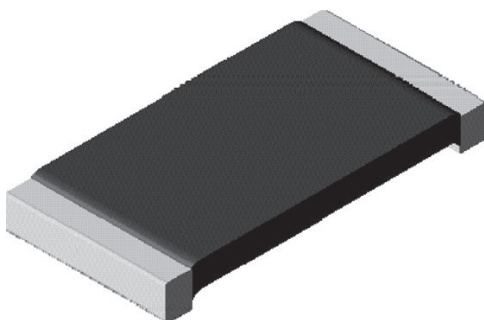
- Datasheet: WSLP2512 - <http://www.vishay.com/doc?30182>
- For technical questions contact ww2bresistors@vishay.com

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components

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FEATURES

- Very high power to foot print size ratio (3 W in 2512 package)
- Ideal for all types of current sensing and pulse applications including switching and linear power supplies, instruments, power amplifiers and shunts
- Proprietary processing technique produces extremely low resistance values (down to 0.0005 Ω)
- All welded construction
- Solid metal nickel-chrome or manganese-copper alloy resistive element with low TCR (< 20 ppm/°C over temperature range of 20 °C to 60 °C)
- Very low inductance 0.5 nH to 5 nH
- Excellent frequency response to 50 MHz
- Low thermal EMF (< 3 μV/°C)
- Compliant to RoHS Directive 2002/95/EC
- AEC-Q200 qualified available ⁽¹⁾

AUTOMOTIVE
GRADE
Available

RoHS
COMPLIANT

GREEN
(5-2008)**
Available

Note

⁽¹⁾ Flame retardance test may not be applicable to some resistor technologies.

Note

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

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{70\text{ }^{\circ}\text{C}}$ W	RESISTANCE VALUE RANGE Ω		WEIGHT (typical) g/1000 pieces
			TOL. ± 0.5 %	TOL. ± 1.0 %	
WSLP2512	2512	3.0	0.003 to 0.01	0.0005 to 0.01	63.6

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/°C	± 275 for 1 mΩ to 2.9 mΩ, ± 150 for 3 mΩ to 4.9 mΩ ± 110 for 5 mΩ to 9.9 mΩ, ± 75 for 10 mΩ
Operating temperature range	°C	- 65 to + 170
Maximum workin voltage	V	$(P \times R)^{1/2}$

GLOBAL PART NUMBER INFORMATION

GLOBAL PART NUMBERING EXAMPLE: WSLP25125L000FEA

W	S	L	P	2	5	1	2	5	L	0	0	0	F	E	A		
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GLOBAL MODEL

WSLP2512

RESISTANCE VALUE

L = mΩ*
R = Decimal
L5000 = 0.0005 Ω
5L000 = 0.005 Ω
R0100 = 0.01 Ω

* Use "L" for resistance values < 0.01 Ω

TOLERANCE CODE

D = ± 0.5 %
F = ± 1.0 %

PACKAGING CODE

EA = Lead (Pb)-free, tape/reel
EK = Lead (Pb)-free, bulk

SPECIAL

Reserved for future specials

Revision 09-Nov-11