

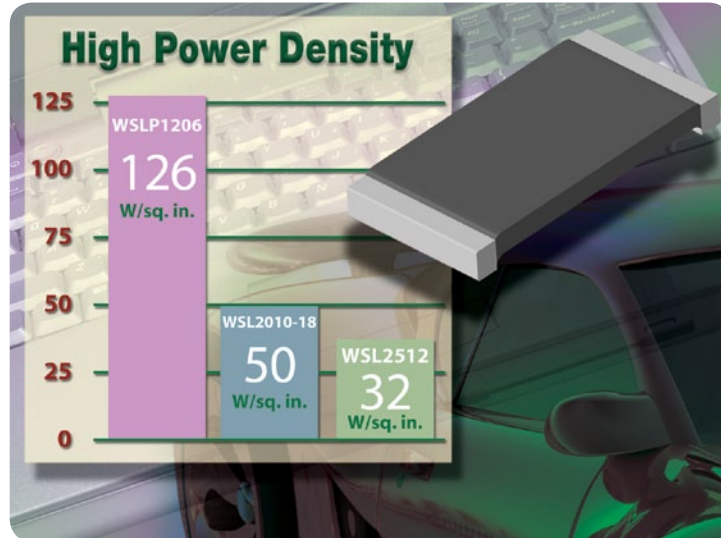
# POWER METAL STRIP® RESISTOR

## WSLP1206



Resistors - 1 W Power Capability in 1206 Package

### Very High-Power (1 W), Low Value (Down to 0.001 $\Omega$ ) , Surface-Mount Power Metal Strip® Resistor



#### KEY BENEFITS

- 1 W power capability in very small 1206 package
- Saves space by enabling use of a 1206 size package to replace 1 W 1508 (35 % space savings), 2010 (61 % space savings) and 2512 (75 % space savings) size parts
- Very low resistance values of 1 m $\Omega$  to 50 m $\Omega$
- Low TCR resistance element (< 20 ppm/ $^{\circ}$ C) results in accurate current-sensing, allowing the use of lower cost ICs
- Lead (Pb)-free construction is RoHS-compliant

#### APPLICATIONS

- Computer
- Automotive

#### RESOURCES

- Datasheet: WSLP1206 - <http://www.vishay.com/doc?30122>
- For technical questions contact [ww2bresistors@vishay.com](mailto:ww2bresistors@vishay.com)



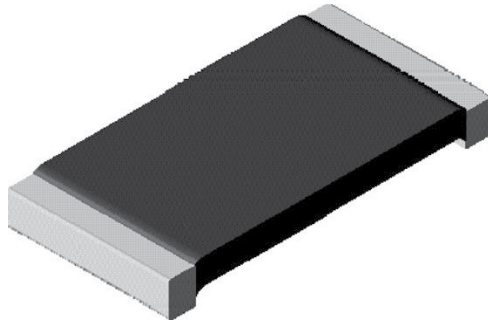
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#### FEATURES

- Very high power to foot print size ratio (1 W in 1206, 0.5 W in 0805 and 0.4 W in 0603 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 0.001 Ω)
- All welded construction
- Solid metal nickel-chrome or manganese-copper alloy resistive element with low TCR (< 20 ppm/°C)
- Very low inductance 0.5 nH to 5 nH
- Excellent frequency response to 50 MHz
- Low thermal EMF (< 3 μV/°C)
- AEC-Q200 qualified available <sup>(1)</sup>
- Compliant to RoHS Directive 2002/95/EC

AUTOMOTIVE GRADE Available



RoHS COMPLIANT

GREEN (5-2008)\*\*

#### Note

<sup>(1)</sup> Flame retardance test may not be applicable to some resistor technologies

#### Note

\*\* Please see document "Vishay Material Category Policy": [www.vishay.com/doc?99902](http://www.vishay.com/doc?99902)

#### STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{70^{\circ}\text{C}}$ W	RESISTANCE VALUE RANGE Ω		WEIGHT (typical) g/1000 pieces
			Tol. ± 0.5 %	Tol. ± 1.0 %	
WSLP0603	0603	0.4	0.015 to 0.1	0.01 to 0.1	1.9
WSLP0805	0805	0.5	0.01 to 0.05	0.01 to 0.05	4.8
WSLP1206	1206	1.0	0.005 to 0.05	0.001 to 0.05	16.2

#### 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 6.9 mΩ, ± 75 for 7 mΩ to 0.1 Ω
Operating temperature range	°C	- 65 to + 170
Maximum workin voltage	V	$(P \times R)^{1/2}$

#### GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: WSLP1206R0100FEA

W S L P 1 2 0 6 R 0 1 0 0 F E A

##### GLOBAL MODEL

WSLP0603  
WSLP0805  
WSLP1206

##### RESISTANCE VALUE

L = mΩ\*  
R = Decimal  
4L000 = 0.004 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: 17-Out-11