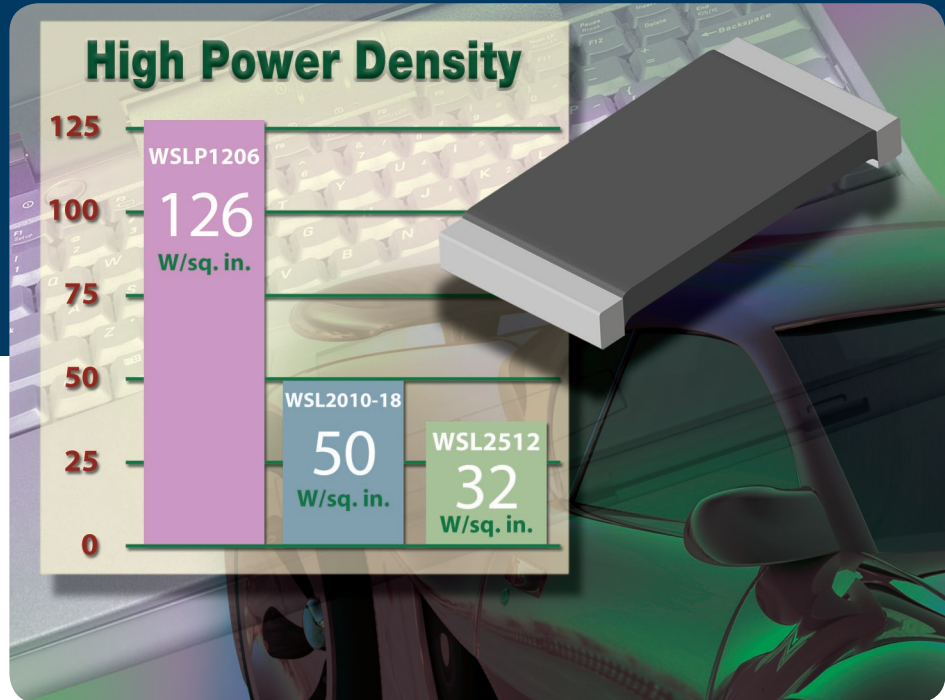




# POWER METAL STRIP® RESISTOR

WSLP1206



## Very High-Power (1-Watt) Surface-Mount Power Metal Strip® Resistor

### KEY BENEFITS

- 1-Watt power capability in very small 1206 package
- Saves space by enabling use of a 1206 size package to replace 1-Watt 1508 (35 % space savings), 2010 (61 % space savings) and 2512 (75 % space savings) size parts
- Very low resistance values of 2 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

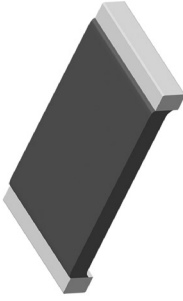
## Power Metal Strip® Resistors, Very High Power (1 W), Low Value (Down to 0.001 Ω), Surface Mount

### FEATURES

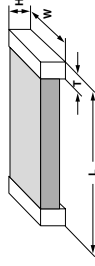
- Very high power to foot print size ratio (1 W in 1206 package)
- Ideal for all types of current sensing and pulse applications including switching and linear power supplies, instruments, power amplifiers and shunts
- Proprietary processing technique produces extremely low resistance values (down to 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)



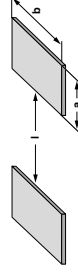
RoHS COMPLIANT



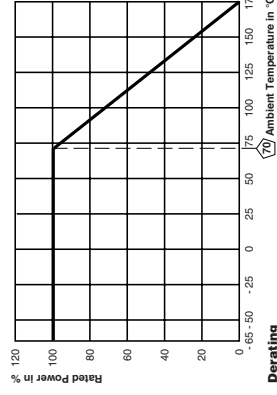
### DIMENSIONS



MODEL	DIMENSIONS in inches (millimeters)			
	L	W	H	T
WSLP1206	0.126 ± 0.010 [3.20 ± 0.254]	0.083 ± 0.010 [0.635 ± 0.254]	0.025 ± 0.010 [0.508 ± 0.254]	0.020 ± 0.010



MODEL	SOLDER PAD DIMENSIONS in inches (millimeters)		
	a	b	l
WSLP1206	0.062 [1.57]	0.070 [1.78]	0.030 [0.76]



STANDARD ELECTRICAL SPECIFICATIONS			
GLOBAL MODEL	POWER RATING P <sub>FB</sub> / W	RESISTANCE RANGE Ω	WEIGHT (Typical) g/1000 pcs
WSLP1206	1.0	± 0.5 % 0.01 - 0.50	16.2

\* Part Marking: Value

TECHNICAL SPECIFICATIONS	
PARAMETER	UNIT
Temperature Coefficient	ppm/°C
Operating temperature range	°C
Maximum Working Voltage	V

WSLP1206  
± 75  
- 65 to 170  
(P × R)<sup>1/2</sup>

GLOBAL PART NUMBER INFORMATION	
New Global Part Numbering: WSLP1206R0100FEA	
W S L P 1 2 0 6 R 0 1 0 0 F E A	
GLOBAL MODEL WSLP1206	RESISTANCE VALUE L = Milliohm* 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 %	PACKING CODE EA = Lead (Pb)-free, Tape/Reel EK = Lead (Pb)-free, Bulk
SPECIAL Reserved for future specials	

PERFORMANCE	
TEST	TEST LIMITS
Thermal Shock	± (0.5 % + 0.0005 Ω) ΔF
Low Temperature Operation	± (0.5 % + 0.0005 Ω) ΔF
High Temperature Exposure	± (1.0 % + 0.0005 Ω) ΔF
Bias Humidity	± (0.5 % + 0.0005 Ω) ΔF
Mechanical Shock	± (0.5 % + 0.0005 Ω) ΔF
Vibration	± (0.5 % + 0.0005 Ω) ΔF
Load Life	± (1.0 % + 0.0005 Ω) ΔF
Resistance to Solder Heat	± (0.5 % + 0.0005 Ω) ΔF
Moisture Resistance	± (0.5 % + 0.0005 Ω) ΔF

PACKING		
MODEL	TAPE WIDTH	PIECES/REEL
WSLP1206	8 mm/Embossed Plastic	4000

Embossed Carrier Tape per EIA-481-2

Revision 29-May-06

**NOTICE** Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc. or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies. Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right. The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.