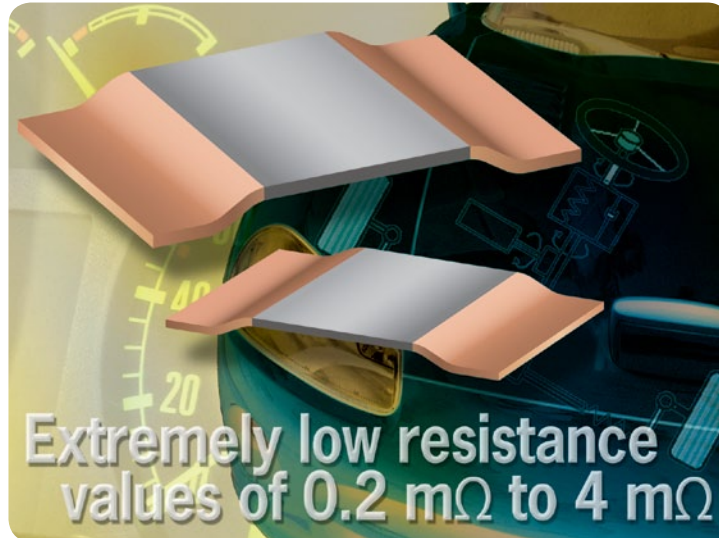




POWER METAL STRIP® RESISTORS

WSL3921 and WSL5931

3-Watt and 5-Watt Surface-Mount, Power Metal Strip® Resistors



KEY BENEFITS

- Extremely low resistance values of 0.2 mΩ to 4 mΩ
- Accurate current sensing with 1 % tolerance
- Low RTC resistance element (< 20 ppm/°C) results in accurate current sensing, allowing the use of lower cost ICs
- Enables use of a single resistor instead of multiple, high-value or low-power resistors

APPLICATIONS

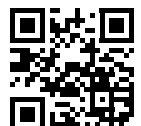
- Automotive
- Consumer
- Industrial

RESOURCES

- Datasheet: WSL3921 and WSL5931 - <http://www.vishay.com/doc?30110>
- For technical questions contact ww2bresistors@vishay.com

Resistors - Accurate Current Sensing: 1 % Tolerance

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

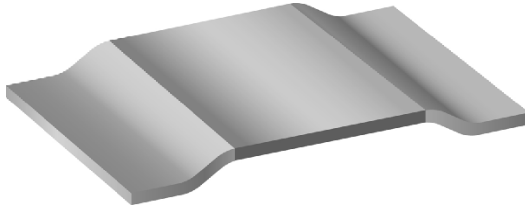


POWER METAL STRIP® RESISTORS

WSL3921 and WSL5931



3-Watt and 5-Watt Surface-Mount, Power Metal Strip® Resistors



FEATURES

- Ideal for all types of current sensing, voltage division and pulse applications including switching and linear power supplies, instruments, power amplifiers
- Proprietary processing technique produces extremely low resistance values, down to 0.0002 Ω
- All welded construction
- Solid metal iron-chrome or manganese-copper alloy resistive element with low TCR (< 20 ppm/°C)
- Very low inductance 0.5 nH to 5 nH
- Low thermal EMF (< 3 μV/°C)
- AEC-Q200 qualified available ⁽¹⁾
- Compliant to RoHS Directive 2002/95/EC

AUTOMOTIVE GRADE Available


RoHS COMPLIANT
GREEN (5-2008)**

Note

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

STANDARD ELECTRICAL SPECIFICATIONS						
GLOBAL MODEL	SIZE	POWER RATING $P_{70\text{ }^\circ\text{C}}$ W	TOLERANCE %	RESISTANCE VALUE RANGE Ω	RESISTANCE VALUES CURRENTLY AVAILABLE ⁽²⁾ Ω	WEIGHT (typical) g/1000 pieces
WSL3921	3921	3.0	1.0, 5.0	0.3m to 4m	0.3m, 0.5m, 1m, 2m, 3m, 4m	281
WSL5931	5931	5.0	1.0, 5.0	0.2m to 3m	0.2m, 0.3m, 0.5m, 1m, 2m, 3m	398

Note

⁽²⁾ Other values may be available, contact factory.

TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/°C	± 225 for 0.2 mΩ, ± 175 for 0.3 mΩ and 0.5 mΩ, ± 75 for 1 mΩ to 4 mΩ
Operating temperature range	°C	- 65 to + 170
Maximum working voltage	V	$(P \times R)^{1/2}$

GLOBAL PART NUMBER INFORMATION															
Global Part Numbering: WSL3921L5000FEA (WSL3921, 0.0005 Ω, ± 1 %)															
W	S	L	3	9	2	1	L	5	0	0	0	F	E	A	
GLOBAL MODEL			RESISTANCE VALUE			TOLERANCE CODE			PACKAGING CODE			SPECIAL			
WSL3921 WSL5931			L = mΩ L5000 = 0.0005 Ω			F = ± 1.0 % J = ± 5.0 %			EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk			(Dash number) (Up to 2 digits) From 1 to 99 as applicable			

Revision 11-Nov-10

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

Resistors - Accurate Current Sensing: 1 % Tolerance