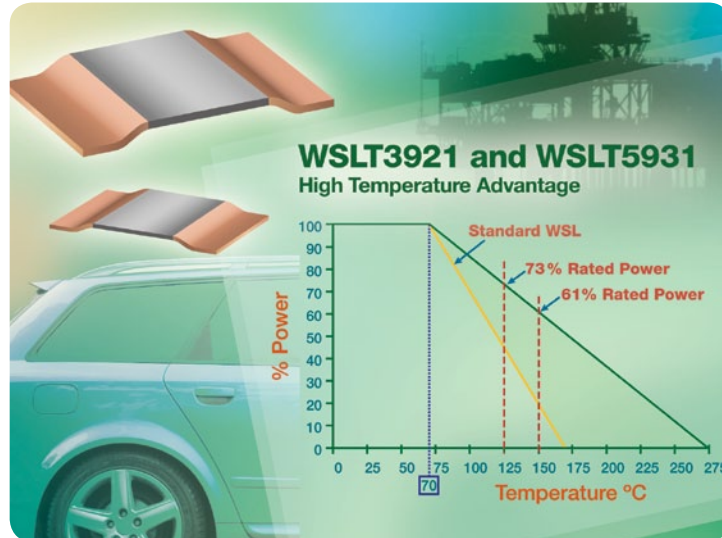


High-Temperature (+ 275 °C) 3 W and 5 W Surface-Mount Power Metal Strip® Resistors



KEY BENEFITS

- Ideal for use in harsh, high temperature environments (to + 275 °C)
- Enables use in high-temperature environments with less derating required: for example, 61 % rated power at 150 °C
- Operating temperature range of – 65 °C to + 275 °C
- Very low resistance values: down to 0.001 Ω
- Low TCR: < 20 ppm/°C
- Very low inductance: < 5 nH
- Excellent frequency response to 50 MHz
- Low thermal EMF: < 3 μV/°C
- Lead (Pb)-free construction is RoHS-compliant

APPLICATIONS

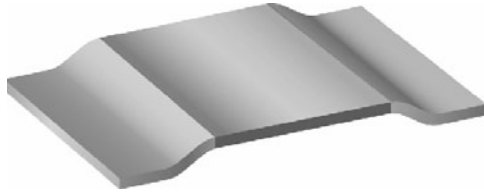
- Automotive electronic controls: engine controls, audio electronics, climate controls, anti-lock brakes, etc.
- Oil/gas well drilling: down-hole test and measurement equipment

RESOURCES

- Datasheet: WSLT3921/5931 - <http://www.vishay.com/doc?30136>
- For technical questions contact ww2bresistors@vishay.com



Power Metal Strip® Resistors, High Temperature (275 °C), Low Value (Down to 0.001 Ω), Surface Mount



FEATURES

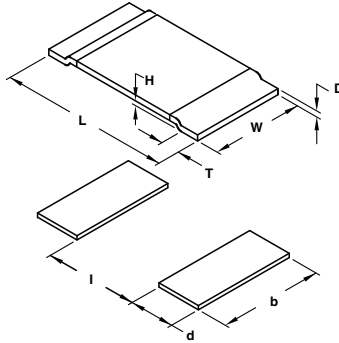
- Ideal for all types of current sensing, voltage division and pulse applications including switching and linear power supplies, instruments, power amplifiers
- Proprietary processing technique produces extremely low resistance values, down to 0.0003 Ω
- Specially selected and stabilized materials allow for high temperature derating (to + 275 °C)
- All welded construction
- Solid metal iron-chrome or manganese-copper alloy resistive element with low TCR (< 20 ppm/°C)
- Very low inductance (< 5 nH)
- Low thermal EMF (< 3 μV/°C)
- AEC-Q200 qualified available ⁽¹⁾
- Compliant to RoHS Directive 2002/95/EC



Note

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

DIMENSIONS



MODEL	DIMENSIONS in inches (millimeters)			
	L	W	H	T
WSLT3921	0.394 ± 0.010 (10.0 ± 0.254)	0.205 ± 0.010 (5.20 ± 0.254)	0.020 (0.5)	0.080 ± 0.010 (2.00 ± 0.254)
WSLT5931	0.591 ± 0.010 (15.0 ± 0.254)	0.305 ± 0.010 (7.75 ± 0.254)	0.020 (0.5)	0.157 ± 0.010 (4.00 ± 0.254)

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
WSLT3921	3921	3.0	1.0, 5.0	0.5 m to 4 m	0.5 m, 1 m, 2 m, 3 m, 4 m	281
WSLT5931	5931	5.0	1.0, 5.0	0.3 m to 3 m	0.3 m, 0.5 m, 1 m, 2 m, 3 m	398

Notes

- Part marking: No part marking on these parts.
- ⁽²⁾ Other values may be available, contact factory.

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/°C	± 175 for 0.3 mΩ and 0.5 mΩ, ± 75 for 1 mΩ to 4 mΩ
Operating temperature range	°C	- 65 to + 275
Maximum working voltage	V	$(P \times R)^{1/2}$

GLOBAL PART NUMBER INFORMATION

Global Part Numbering: WSLT39212L000FEA (WSLT3921, 0.002 Ω, ± 1 %)

Revision 18-Nov-10

W	S	L	T	3	9	2	1	2	L	0	0	0	F	E	A		
GLOBAL MODEL		RESISTANCE VALUE		TOLERANCE CODE		PACKAGING CODE				SPECIAL							
WSLT3921 WSLT5931		L = mΩ 2L000 = 0.002 Ω		F = ± 1.0 % J = ± 5.0 %		EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk				Reserved for future specials							