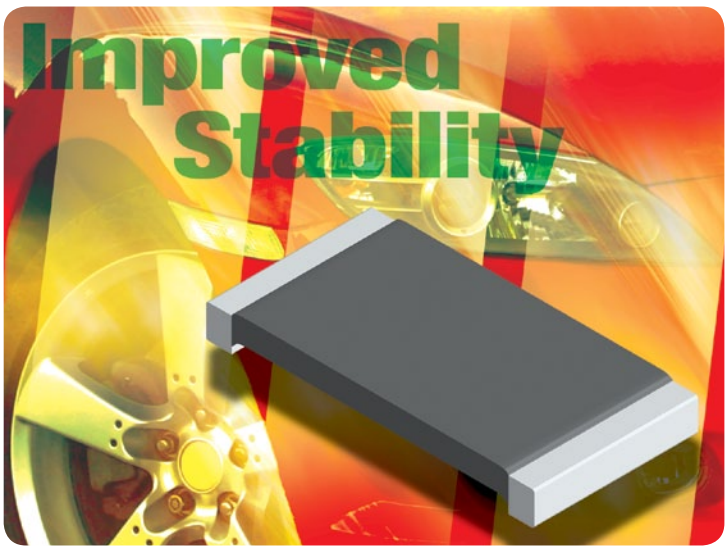
POWER METAL STRIP® RESISTOR

WSLS2512xxxxxxGxx

Improved Stability (0.25 %), Low Value (0.01 Ω to 0.1 Ω), Surface-Mount Power Metal Strip® Resistor



KEY BENEFITS

- Current sensing in high-temperature (+ 125 °C) applications
- Improved resistance stability during operation (resistance change of 0.25 % through a 2000-hour workload)
- Very low resistance values: 10 mΩ to 100 mΩ resistance
- Durable with all-welded construction and a solid metal nickel-chrome alloy resistive element with low TCR (< 20 ppm/°C)

APPLICATIONS

- Automotive
- Industrial

RESOURCES

- Datasheet: WSLS2512xxxxxxGxx - http://www.vishay.com/doc?30123
- For technical questions contact ww2bresistors@vishay.com

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WSLS2512xxxxxxGxx

Improved Stability (0.25 %), Low Value (0.01 Ω to 0.1 Ω), Surface-Mount Power Metal Strip® Resistor

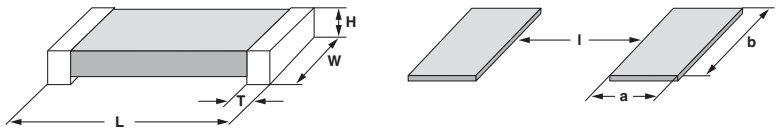
FEATURES

- Current sensing in high-temperature (+ 125 °C) applications
- Greater stability with maximum resistance change of 0.25 % or 0.5 % through 2000 h workload
- Ideal for all types of current sensing, voltage division and pulse applications including switching and linear power supplies, instruments, power amplifiers and shunts
- Proprietary processing technique produces extremely low resistance values (0.01 Ω to 0.1 Ω)
- All welded construction
- Solid metal nickel-chrome resistive element with low TCR (< 20 ppm/°C)
- Very low inductance 0.5 neH to 2 nH
- Excellent frequency response to 50 MHz
- Low thermal EMF (< 3 µV/°C)
- AEC-Q200 qualified (1)
- Compliant to RoHS Directive 2002/95/EC

Note

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

DIMENSIONS in inches (millimeters)



MODEL	DIMENSIONS				SOLDER PAD DIMENSIONS		
	L	W	H	T	a	b	l
WSLS2512	0.250 ± 0.010 (6.35 ± 0.254)	0.125 ± 0.010 (3.18 ± 0.254)	0.025 ± 0.010 (0.635 ± 0.254)	0.030 ± 0.010 (0.762 ± 0.254)	0.065 (1.65)	0.145 (3.68)	0.160 (4.06)

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{70\,°C}$ W	TOLERANCE ± %	RESISTANCE VALUE RANGE Ω	WEIGHT (typical) g/1000 pieces
WSLS2512	2512	1.0	0.5, 1.0, 5.0	0.01 to 0.1	63.6

Note

- Part marking: Value, RTC/stability code.

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/°C	± 75
Operating temperature range	°C	- 65 to + 170
Maximum working voltage	V	$(P \times R)^{1/2}$

GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: WSLS2512R0100FHEA

W	S	L	S	2	5	1	2	R	0	1	0	0	F	H	E	A		

GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	RTC/STABILITY	PACKAGING CODE	SPECIAL
WSLS2512	**R** = Decimal **R0100** = 0.01 Ω	**D** = ± 0.5 % **F** = ± 1.0 % **J** = ± 5.0 %	**G** = 75 ppm, 0.25 % stability **H** = 75 ppm, 0.5 % stability	**EA** = Lead (Pb)-free, tape/reel **EK** = Lead (Pb)-free, bulk	(Dash number) (up to 2 digits) From **1 to 99** as applicable

Revision 04-Feb-11

Resistors - Improved Stability