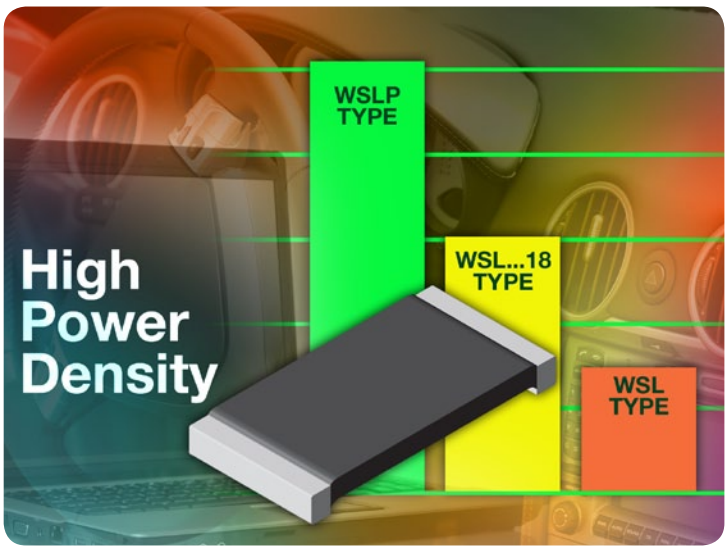
POWER METAL STRIP® RESISTOR

WSLP Series

Resistors – 0.4 W of Power in the 0603 Package

WSLP0603 – Newest Addition to the WSLP Family of Surface-Mount Power Metal Strip® Resistors



KEY BENEFITS

- WSLP0603 resistor has 0.4 W power capability in very small 0603 package size
- Very low resistance values of 0.01 mΩ to 0.1 mΩ
- AEC-Q200 qualified*

APPLICATIONS

Computer:

- DC-DC converters
- VRMs for notebook computers
- Li-Ion battery management / safety
- Hard disk drives
- PC cards

Automotive:

- Engine and transmission controls
- Audio electronics
- Climate controls
- Anti-lock brakes

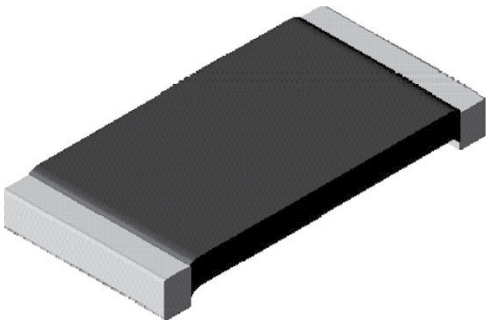
RESOURCES

- Datasheet: WSLP - http://www.vishay.com/doc?30122
- For technical questions contact ww2bresistors@vishay.com

*Flame retardance test may not be applicable to some resistor technologies

Resistors – 0.4 W of Power in the 0603 Package

Power Metal Strip® Resistor, Very High Power (to 1 W), Low Value (down to 0.001 Ω), Surface Mount



FEATURES

AUTOMOTIVE GRADE Available

Pb-free

e3

RoHS COMPLIANT

GREEN (5-2008)**

- 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 (1)
- Compliant to RoHS Directive 2002/95/EC

Note

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

Note

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

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{70\,°C}$ 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	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING CODE	SPECIAL
WSLP0603 **WSLP0805** **WSLP1206**	**L** = mΩ* **R** = Decimal **4L000** = 0.004 Ω **R0100** = 0.01 Ω * Use "**L**" for resistance values < 0.01 Ω	**D** = ± 0.5 % **F** = ± 1.0 %	**EA** = Lead (Pb)-free, tape/reel **EK** = Lead (Pb)-free, bulk	Reserved for future specials

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