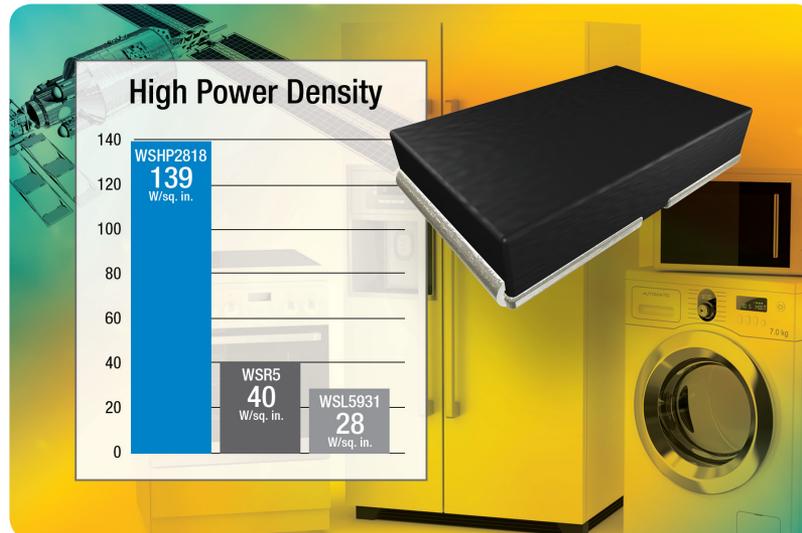




POWER METAL STRIP® RESISTORS

WSHP2818

Power Metal Strip® Resistors, High Power (Up to 10 W), Low Value (Down to 0.001 Ω), Surface-Mount



KEY BENEFITS

- 10 W power capability in small 2818 size package
- Very low resistance values (1 mΩ to 100 mΩ)

APPLICATIONS

Automotive:

- Electronic controls (engine controls, climate controls, anti-lock brakes, etc.)
- Brushless DC motor controls (electric power steering, electric – water pump / oil pump / air conditioning / etc.)
- Electric and hybrid controls (battery management)

Industrial:

- Oil / gas well drilling (down hole test / measurement equipment)
- Air conditioning / heat pump (inverter control)

Consumer:

- Air conditioning / heat pump (inverter control)
- White goods (inverter control)

Computer:

- DC/DC converters, VRMs for servers
- Power management / safety

RESOURCES

- Datasheet: WSHP2818 - www.vishay.com/doc?30347
- For technical questions contact ww2bresistors@vishay.com
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



A WORLD OF
SOLUTIONS

Power Metal Strip® Resistors, High Power (Up to 10 W), Low Value (Down to 0.001 Ω), Surface-Mount



DESIGN TOOLS (click logo to get started)



FEATURES

- Improved thermal management incorporated into design
- All welded construction of the Power Metal Strip resistors are ideal for all types of current sensing, voltage division, and pulse applications
- Proprietary processing technique produces extremely low resistance values
- Very low inductance (< 5 nH)
- Solid metal nickel-chrome or manganese-copper alloy resistive element with low TCR (< 20 ppm/°C)
- Low thermal EMF (< 3 μV/°C)
- AEC-Q200 qualified ⁽¹⁾

Notes

- Follow link to Overview of Automotive Grade Products for more details: www.vishay.com/doc?49924.
- (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	RESISTANCE VALUE RANGE Ω		WEIGHT (typical) g/1000 pieces
			Tol. ± 0.5 %	Tol. ± 1.0 %	
WSHP2818	2818	10 ⁽¹⁾	0.010 to 0.1	0.001 to 0.1	167.8

Note

- (1) The WSHP2818 is rated at 10 W with maximum surface temperature of 200 °C based on 70 °C ambient temperature.

GLOBAL PART NUMBER INFORMATION

Global Part Numbering: WSHP2818R1000FEA (visit www.vishay.net Vishay Dale parts numbering manual for all options)

W	S	H	P	2	8	1	8	R	1	0	0	0	F	E	A		
GLOBAL MODEL (8 digits) WSHP2818				RESISTANCE VALUE (5 digits) L = mΩ* R = decimal 4L000 = 0.004 Ω R0100 = 0.01 Ω * Use "L" for resistance values < 0.01 Ω				TOLERANCE CODE (1 digit) D = ± 0.5 % F = ± 1.0 %		PACKAGING CODE ⁽¹⁾ (2 digits) EA = lead (Pb)-free, tape/reel EK = lead (Pb)-free, bulk				SPECIAL (up to 2 digits) (Dash number) From 1 to 99 as applicable			

Note

- (1) EB (lead (Pb) free) is a non-standard packaging code designated for 1000 piece reels. The non-standard packaging code is identical to our standard EA (lead (Pb) free), except that it has a package quantity of 1000 pieces.

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