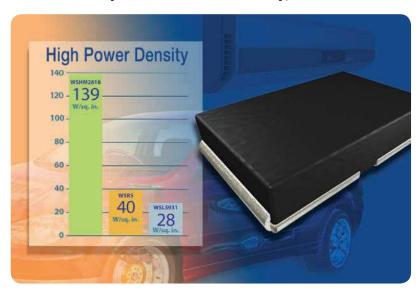


POWER METAL STRIP® RESISTORS

WSHM2818

Power Metal Strip[®] Resistors, High Power (7 W), Low Value (Down to 0.001 Ω), Surface Mount



KEY BENEFITS

- · Improved thermal management incorporated into design
- The WSHM2818 resistor has 7 W power capability in a small 2818 size package
- Very low inductance (< 5 nH)
- 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 (electronic 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 converter, VRMs for servers
- Power management / safety

RESOURCES

- Datasheet: WSHM2818 www.vishay.com/doc?30188
- For technical questions contact <u>ww2bresistors@vishay.com</u>
- Material categorization: For definitions please see www.vishay.com/doc?99912





PRODUCT SHEET 1/2 VMN-PT0284-1410



POWER METAL STRIP® RESISTORS

WSHM2818

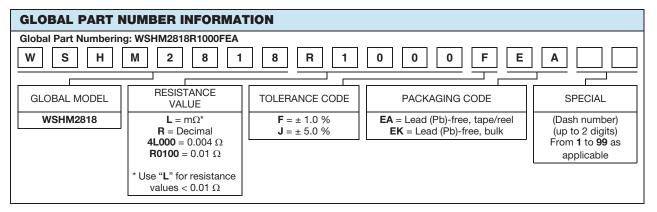
Power Metal Strip® Resistors, High Power (7 W), Low Value (Down to 0.001 Ω), Surface Mount

STANDARD ELECTRICAL SPECIFICATIONS									
GLOBAL MODEL	SIZE	POWER RATING P _{70 °C} W	TOLERANCE ± %	RESISTANCE VALUE RANGE Ω	WEIGHT (typical) g/1000 pieces				
WSHM2818	2818	7 (2)	1.0	0.001 to 0.1	167.8				

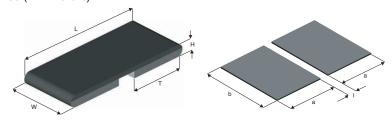
Note

⁽²⁾ The WSHM2818 is rated at 7 W with maximum surface temperature of 180 °C.

TECHNICAL SPECIFICATIONS						
PARAMETER	UNIT	RESISTOR CHARACTERISTICS				
Temperature coefficient	ppm/°C	\pm 200 for 1 m Ω to 5.99 m Ω \pm 75 for 6 m Ω to 100 m Ω				
Inductance	nH	< 5				
Operating temperature range	°C	-65 to +170				
Maximum continuous current	А	(P/R) ^{1/2}				



DIMENSIONS in inches (millimeters)



MODEL	RESISTANCE RANGE	DIMENSIONS				SOLDER PAD DIMENSIONS		
	Ω	L	W	Н	Т	а	b	1
WSHM2818	0.001 to 0.1	0.280 ± 0.010 (7.1 ± 0.25)	0.180 ± 0.010 (4.6 ± 0.25)	0.059 ± 0.010 (1.50 ± 0.25)	0.125 ± 0.010 (3.18 ± 0.25)	0.138 (3.5)	0.200 (5.1)	0.024 (0.61)