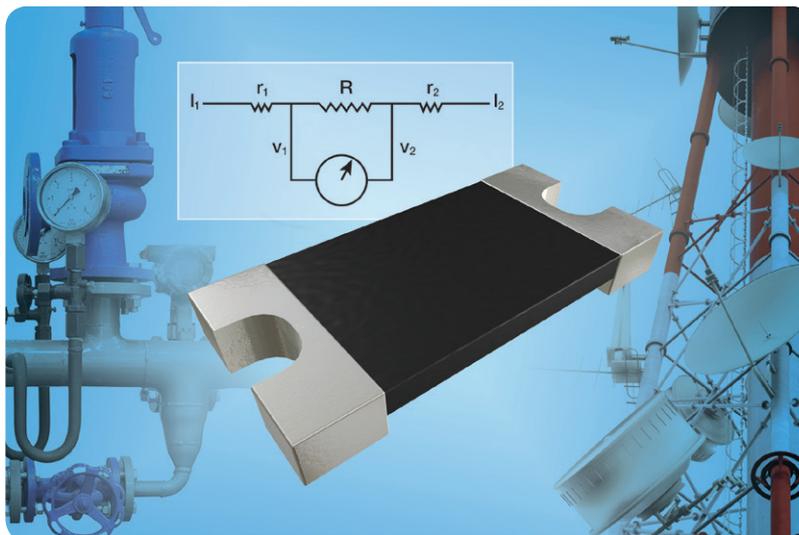




# POWER METAL STRIP® RESISTORS

## WSK1206

### Power Metal Strip® Current Sense Resistor, Tight Tolerance (Down to 0.1 %), Low Value (0.01 $\Omega$ to 0.05 $\Omega$ )



#### KEY BENEFITS

- 4-terminal design enables tolerance < 1 % and reduced temperature coefficient
- Low resistance value range: 0.01  $\Omega$  to 0.050  $\Omega$

#### APPLICATIONS

- Telecommunications: power management in cell phones
- Computer: power management and safety, DC/DC converter, VRMs, and Li-Ion battery management
- Industrial: instrumentation
- Automotive: electronic controls (engine and transmission controls, audio electronics, climate controls, anti-lock brakes, etc.)

#### RESOURCES

- Datasheet: WSK1206 - [www.vishay.com/doc?30195](http://www.vishay.com/doc?30195)
- For technical questions contact [ww2bresistors@vishay.com](mailto:ww2bresistors@vishay.com)
- Material categorization: for definitions of compliance, please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



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**POWER METAL STRIP® RESISTORS**

WSK1206

**Power Metal Strip® Current Sense Resistor,  
Tight Tolerance (Down to 0.1%), Low Value (0.01 Ω to 0.05 Ω)**

- 4-terminal design
- Ideal for all types of current sensing, voltage division and pulse applications
- Proprietary processing technique produces extremely low resistance values
- Durable with all-welded construction
- All welded construction
- Solid metal nickel-chrome or manganese-copper resistive element with low TCR (< 20 ppm/°C)
- Low thermal EMF (< 3 μV/°C)

STANDARD ELECTRICAL SPECIFICATIONS						
GLOBAL MODEL	SIZE	POWER RATING $P_{70^{\circ}\text{C}}$ W	RESISTANCE VALUE RANGE Ω			WEIGHT (typical) g/1000 pieces
			Tol. ± 0.1 %	Tol. ± 0.5 %	Tol. ± 1.0 %	
WSK1206	1206	0.25	0.05 to 0.04	0.01 to 0.05	0.01 to 0.05	16

**Notes**

- Part marking: due to resistor size limitation, parts will be marked with only the resistance value..
- Resistance values are available per WSL decade table ([www.vishay.com/doc?30117](http://www.vishay.com/doc?30117)).

TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Component temperature coefficient (including terminal) <sup>(1)</sup>	ppm/°C	± 35
Element TCR <sup>(2)</sup>	ppm/°C	< 20
Operating temperature range	°C	-65 to +170
Maximum working voltage <sup>(3)</sup>	V	$(P \times R)^{1/2}$

**Notes**

- (1) Component TCR - total TCR that includes the TCR effects of the resistor element and the copper terminal.
- (2) Element TCR - only applies to the alloy used for the resistor element; refer to item 1 in the construction illustration on the following page.
- (3) Maximum working voltage - the WSL is not voltage sensitive, but is limited by power / energy dissipation and is also not ESD sensitive.

Revision 17-Sep-15