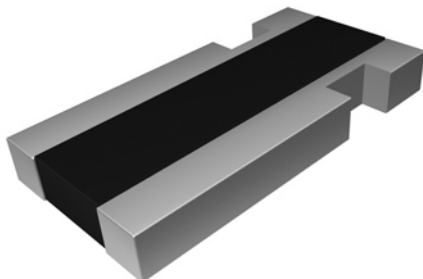


Power Metal Strip® Resistors, High Power, Surface Mount, 4-Terminal



FEATURES

- 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
- Low thermal EMF ($< 3 \mu\text{V}/^\circ\text{C}$)
- Solid metal nickel-chrome or manganese-copper resistive element with low TCR ($< 20 \text{ ppm}/^\circ\text{C}$)
- Compliant to RoHS Directive 2002/95/EC
- AEC-Q200 qualified available ⁽¹⁾

AUTOMOTIVE
GRADE
Available



RoHS
COMPLIANT
GREEN
(5-2008)**

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 $P_{70^\circ\text{C}}$ W	TOLERANCE $\pm \%$	RESISTANCE VALUE RANGE Ω	RESISTANCE VALUES CURRENTLY AVAILABLE ⁽²⁾ Ω	WEIGHT (typical) g/1000 pieces
WSK0612	0612	1.0	1.0	0.50m to 5.0m	0.5m, 0.75m, 1m, 2m, 3m, 4m, 5m	8.2

Note

⁽²⁾ Other values may be available, contact factory.

TECHNICAL SPECIFICATIONS

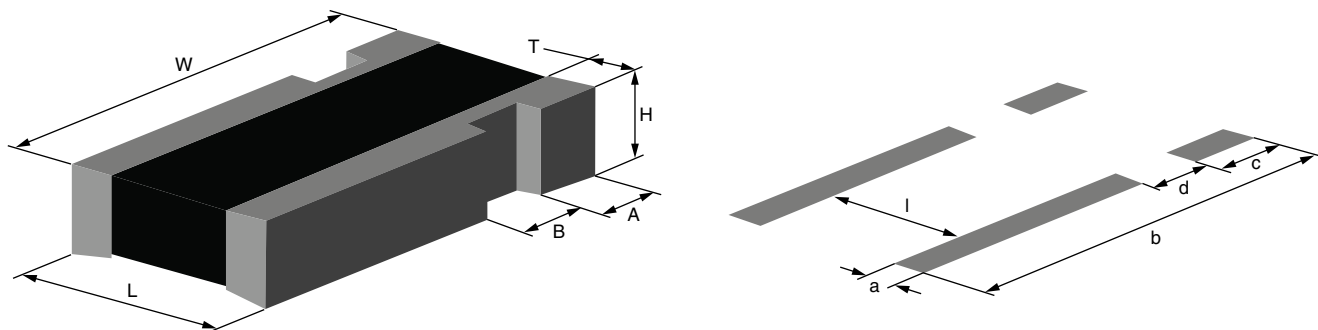
PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/ $^\circ\text{C}$	± 600 for 0.5 m Ω and 0.75 m Ω , ± 275 for 1 m Ω , ± 225 for 2 m Ω , ± 150 for 3 m Ω , 4 m Ω and 5 m Ω
Operating temperature range	$^\circ\text{C}$	- 65 to + 170
Maximum working voltage	V	$(P \times R)^{1/2}$

GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: WSK06121L000FEA

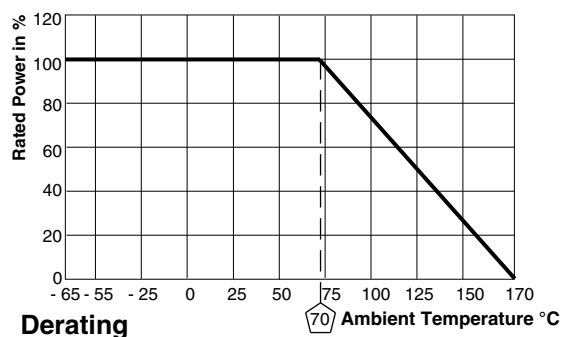
W	S	K	0	6	1	2	1	L	0	0	0	F	E	A		
GLOBAL MODEL			RESISTANCE VALUE				TOLERANCE CODE		PACKAGING CODE				SPECIAL			
WSK0612			L = m Ω L5000 = 0.0005 Ω L7500 = 0.00075 Ω 1L000 = 0.001 Ω 2L000 = 0.002 Ω 3L000 = 0.003 Ω 4L000 = 0.004 Ω 5L000 = 0.005 Ω				F = $\pm 1.0 \%$		EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk				(Dash number) (Up to 2 digits) From 1 to 99 as applicable			

DIMENSIONS



MODEL	DIMENSIONS in inches (millimeters)					
	L	W	H	T	A	B
WSK0612	0.060 ± 0.010 (1.50 ± 0.254)	0.120 ± 0.010 (3.05 ± 0.254)	0.015 ± 0.010 (0.381 ± 0.254)	0.015 ± 0.010 (0.381 ± 0.254)	0.020 ± 0.005 (0.51 ± 0.127)	0.020 ± 0.005 (0.51 ± 0.127)

MODEL	SOLDER PAD DIMENSIONS in inches (millimeters)				
	a	b	c	d	l
WSK0612	0.040 (1.01)	0.135 (3.43)	0.030 (0.762)	0.015 (0.381)	0.030 (0.76)



PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal shock	- 55 °C to + 150 °C, 1000 cycles, 15 min at each extreme	± 1.0 % ΔR
Short time overload	5 x rated power for 5 s	± 0.5 % ΔR
Low temperature operation	- 65 °C for 45 min	± 0.5 % ΔR
High temperature exposure	1000 h at + 170 °C	± 2.0 % ΔR
Bias humidity	+ 85 °C, 85 % RH, 10 % bias, 1000 h	± 0.5 % ΔR
Mechanical shock	100 g's for 6 ms, 5 pulses	± 0.5 % ΔR
Vibration	Frequency varied 10 Hz to 2000 Hz in 1 min, 3 directions, 12 h	± 0.5 % ΔR
Load life	1000 h at + 70 °C, 1.5 h "ON", 0.5 h "OFF"	± 2.0 % ΔR
Resistance to solder heat	+ 260 °C solder, 10 s to 12 s dwell, 25 mm/s emergence	± 0.5 % ΔR
Moisture resistance	MIL-STD-202, method 106, 0 % power, 7a and 7b not required	± 1.0 % ΔR

PACKAGING				
MODEL	REEL			
	TAPE WIDTH	DIAMETER	PIECES/REEL	CODE
WSK0612	8 mm/embossed plastic	178 mm/7"	4000	EA

Note

- Embossed Carrier Tape per EIA-481.



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Material Category Policy

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Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

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