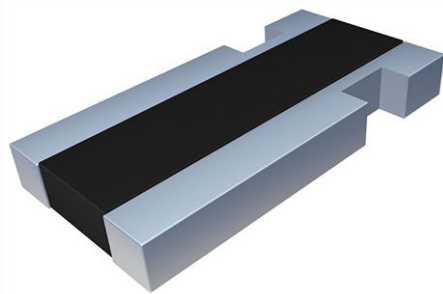


Power Metal Strip® Resistors, High Power, Surface Mount, 4-Terminal



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 ($< 20 \text{ ppm}/^\circ\text{C}$)
- AEC-Q200 qualified available ⁽¹⁾
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

 AUTOMOTIVE
GRADE
Available

RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

Note

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

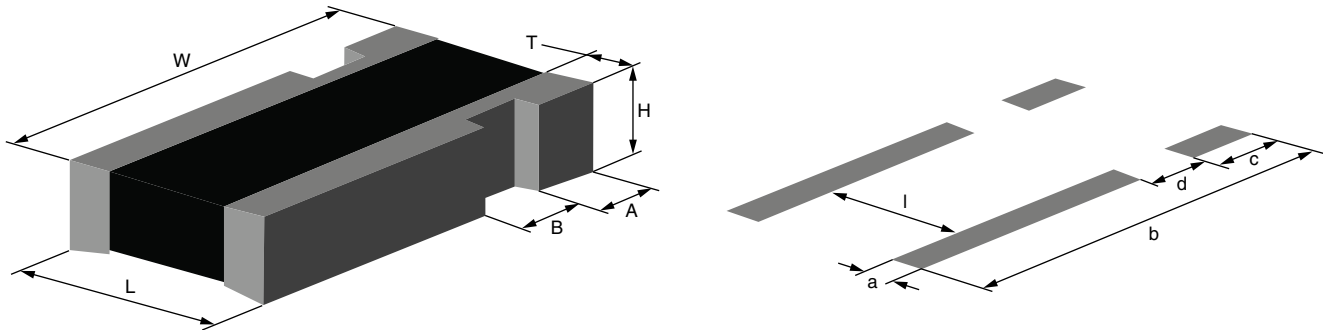
STANDARD ELECTRICAL SPECIFICATIONS						
GLOBAL MODEL	SIZE	POWER RATING $P_{70^\circ\text{C}}$ W	TOLERANCE $\pm \%$	RESISTANCE VALUE RANGE Ω	RESISTANCE VALUES CURRENTLY AVAILABLE ⁽²⁾ Ω	WEIGHT (typical) g/1000 pieces
WSK0612	0612	1.0	1.0	0.50m to 5.0m	0.5m, 0.75m, 0.8m, 1m, 2m, 3m, 4m, 5m	8.2

Note

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

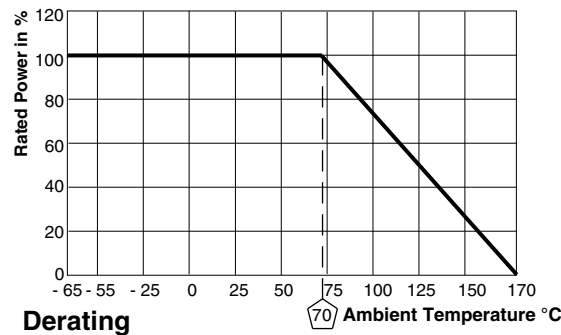
TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/ $^\circ\text{C}$	0 to -600 for 0.5 m Ω , ± 200 for 0.75 m Ω , 0 to -275 for 1 m Ω , 0 to -225 for 2 m Ω , 0 to -150 for 3 m Ω , 4 m Ω , and 5 m Ω
Operating temperature range	$^\circ\text{C}$	-65 to +170
Maximum 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 WSK0612			RESISTANCE VALUE L = m Ω L5000 = 0.0005 Ω L7500 = 0.00075 Ω L8000 = 0.0008 Ω 1L000 = 0.001 Ω 2L000 = 0.002 Ω 3L000 = 0.003 Ω 4L000 = 0.004 Ω 5L000 = 0.005 Ω				TOLERANCE CODE F = $\pm 1.0 \%$		PACKAGING CODE EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk				SPECIAL (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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