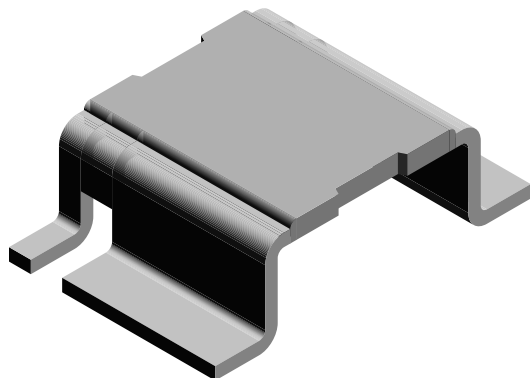


Power Metal Strip® Resistors, Low Value, High Power, Surface Mount



FEATURES

- High power to foot print size ratio
- Ideal for all types of current sensing, voltage division and pulse applications including switching and linear power supplies, instruments, power amplifiers and shunts
- Proprietary processing technique produces extremely low resistance values, down to 0.0005 Ω
- All welded construction
- Solid metal iron-chrome or manganese-copper alloy resistive element with low TCR (< 20 ppm/ $^{\circ}\text{C}$)
- Very low inductance 0.5 nH to 5 nH
- Low thermal EMF (< 3 $\mu\text{V}/^{\circ}\text{C}$)
- Compliant to RoHS directive 2002/95/EC



RoHS
COMPLIANT
GREEN
(5-2009)**

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{70^{\circ}\text{C}}$ W	TOLERANCE %	RESISTANCE VALUE RANGE Ω	RESISTANCE VALUES CURRENTLY AVAILABLE ⁽¹⁾ Ω	WEIGHT (typical) g/1000 pieces
WSL4026	4026	3.0	1.0	0.5m to 5m	0.5m, 2m, 3m, 5m	420

Notes

- Power rating depends on the max. temperature at the solder point, component placement density and the substrate material.
 - Part marking: Model, value, tolerance, date code.
- ⁽¹⁾ Other values may be available, contact factory.

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/ $^{\circ}\text{C}$	± 75 over temperature of $+ 20^{\circ}\text{C}$ to $+ 60^{\circ}\text{C}$
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: WSL4026L5000FEA (WSL4026, 0.0005 Ω , $\pm 1\%$)

W S L 4 0 2 6 L 5 0 0 0 F E A

GLOBAL MODEL
WSL4026

RESISTANCE VALUE
L = m Ω
L5000 = 0.0005 Ω
2L000 = 0.0020 Ω
3L000 = 0.0030 Ω
5L000 = 0.0050 Ω

TOLERANCE CODE
F = $\pm 1.0\%$

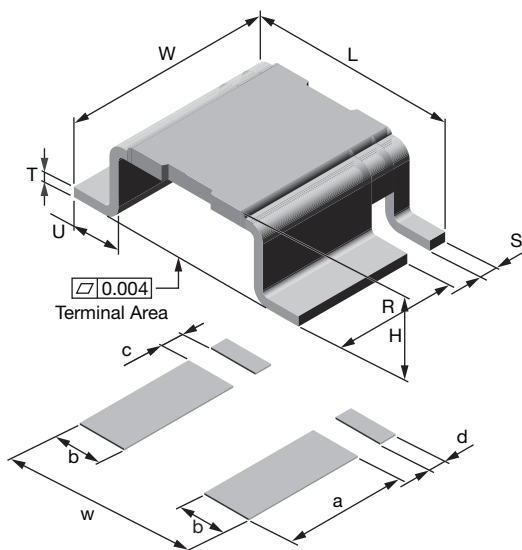
PACKAGING CODE
EA = Lead (Pb)-free, tape/reel
EK = Lead (Pb)-free, bulk

SPECIAL
(Dash number)
(Up to 2 digits)
From 1 to 99 as
applicable

** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

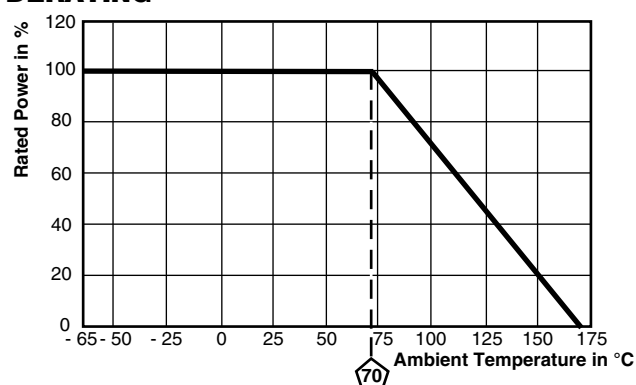
DIMENSIONS

MODEL	DIMENSIONS in inches (millimeters)						
	L	W	H	R	S	T	U
WSL4026	0.400 ± 0.008 (10.1 ± 0.2)	0.260 + 0.012/- 0.008 (6.6 + 0.3/- 0.2)	0.117 ± 0.008 (3.0 ± 0.2)	0.193 ± 0.004 (4.9 ± 0.1)	0.028 ± 0.004 (0.7 ± 0.1)	0.016 ± 0.002 (0.4 ± 0.05)	0.078 ± 0.004 (2.0 ± 0.1)



MODEL	SOLDER PAD DIMENSIONS in inches (millimeters)				
	a	b	c	d	w
WSL4026	0.220 (5.6)	0.096 (2.44)	0.035 (0.89)	0.035 (0.89)	0.420 (10.6)

DERATING



PERFORMANCE

TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal shock	- 55 °C to + 150 °C, 1000 cycles, 15 min at each extreme	± (0.5 % + 0.0005 Ω) ΔR
Short time overload	0.5 mΩ, 2 mΩ and 3 mΩ - 5 x rated power for 5 s 5 m - 3 x rated power for 5 s	± (0.5 % + 0.0005 Ω) ΔR
Low temperature operation	- 65 °C for 45 min	± (0.5 % + 0.0005 Ω) ΔR
High temperature exposure	1000 h at + 170 °C	± (1.0 % + 0.0005 Ω) ΔR
Bias humidity	+ 85 °C, 85 % RH, 10 % bias, 1000 h	± (0.5 % + 0.0005 Ω) ΔR
Mechanical shock	100 g's for 6 ms, 5 pulses	± (0.5 % + 0.0005 Ω) ΔR
Vibration	Frequency varied 10 Hz to 2000 Hz in 1 min, 3 directions, 12 h	± (0.5 % + 0.0005 Ω) ΔR
Load life	1000 h at + 70 °C, 1.5 h "ON", 0.5 h "OFF"	± (1.0 % + 0.0005 Ω) ΔR
Resistance to solder heat	+ 260 °C solder, 10 s to 12 s dwell, 25 mm/s emergence	± (0.5 % + 0.0005 Ω) ΔR
Moisture resistance	MIL-STD-202, method 106, 0 % power, 7b not required	± (0.5 % + 0.0005 Ω) ΔR

PACKAGING

MODEL	REEL			
	TAPE WIDTH	DIAMETER	PIECES/REEL	CODE
WSL4026	16 mm/embossed plastic	330 mm/13"	1500	EA

Note

- Embossed carrier tape per EIA-481-2.



Disclaimer

All product specifications and data are subject to change without notice.

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