

TECHNICAL SPECIFICATIONS

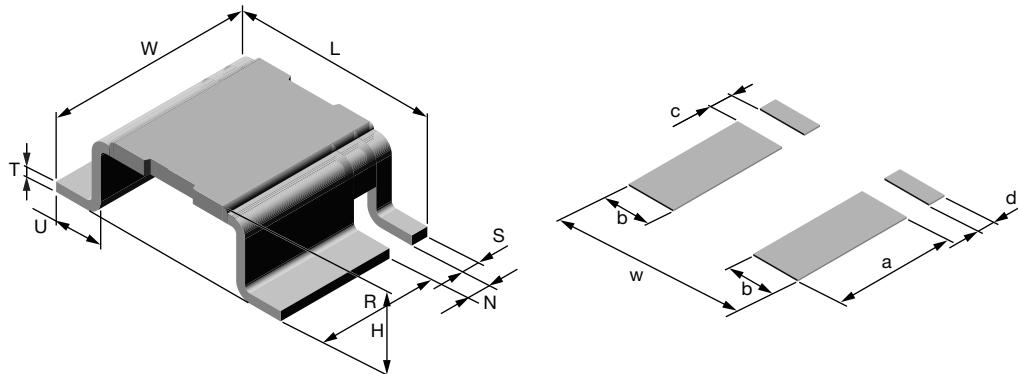
PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Component temperature coefficient (including terminal) ⁽¹⁾ TCR measured from -55 °C to 150 °C	ppm/°C	± 75 for 0.5 mΩ to 5 mΩ
		± 110 for 0.3 mΩ; ± 75 for 0.2 mΩ
Element TCR ⁽²⁾	ppm/°C	< 20
Operating temperature range	°C	-65 to +170
Maximum working voltage ⁽³⁾	V	(P x 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

(3) Maximum working voltage - the WSL is not voltage sensitive, but is limited by power / energy dissipation and is also not ESD sensitive

DIMENSIONS in inches (millimeters)

Notes

- 3D models available: www.vishay.com/doc?30316
- Surface mount solder profile recommendations: www.vishay.com/doc?31052

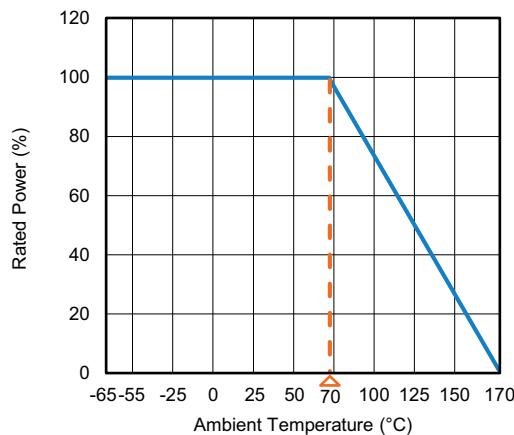
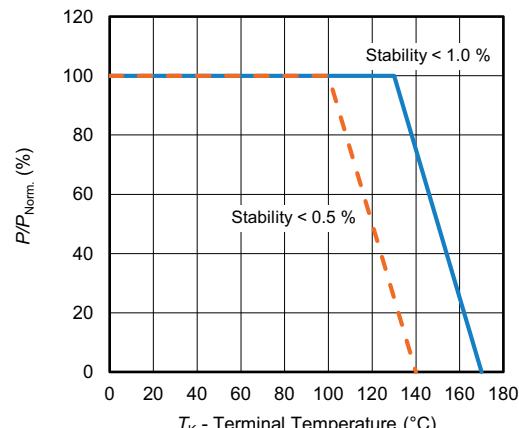
MODEL	DIMENSIONS							
	L	W	H	R (REF.)	S	T	U	N
WSLP4026	0.400 ± 0.008 (10.1 ± 0.2)	0.260 + 0.012/- 0.008 (6.6 + 0.3/- 0.2)	Please see table below	0.198 (5.0)	0.028 ± 0.004 (0.7 ± 0.1)	0.016 ± 0.002 (0.4 ± 0.05)	0.078 ± 0.004 (2.0 ± 0.1)	0.039 ± 0.006 (0.99 ± 0.15)

MODEL	SOLDER PAD DIMENSIONS				
	a	b	c	d	w
WSLP4026	0.220 (5.6)	0.096 (2.44)	0.035 (0.89)	0.035 (0.89)	0.420 (10.6)

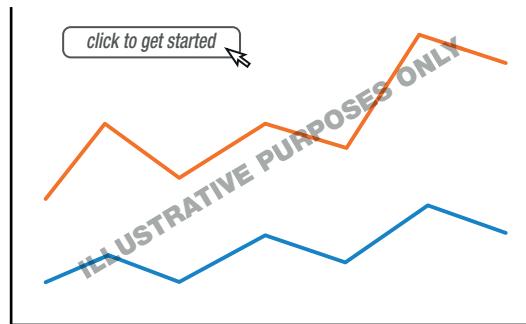
MODEL	RESISTANCE VALUE (mΩ)	THERMAL RESISTANCE ⁽¹⁾ (°C/W)	ELEMENT MATERIAL	HEIGHT H
WSLP4026	0.2	3	Mn-Cu-Sn	0.150 ± 0.008 (3.81 ± 0.2)
	0.3	4	Mn-Cu	0.141 ± 0.008 (3.58 ± 0.2)
	0.5	6	Mn-Cu	0.116 ± 0.008 (2.95 ± 0.2)
	0.7	8	Mn-Cu	0.111 ± 0.008 (2.82 ± 0.2)
	1.0	10	Mn-Cu	0.1055 ± 0.008 (2.68 ± 0.2)
	1.3	11	Ni-Cr	0.119 ± 0.008 (3.02 ± 0.2)
	2.0	16	Ni-Cr	0.114 ± 0.008 (2.9 ± 0.2)
	3.0	19	Ni-Cr	0.110 ± 0.008 (2.79 ± 0.2)
	4.0	22	Ni-Cr	0.110 ± 0.008 (2.79 ± 0.2)
	5.0	38	Ni-Cr	0.110 ± 0.008 (2.79 ± 0.2)

Note

(1) The full power rating of Power Metal Strip resistors are dependent upon the ability of the circuit board to dissipate the heat energy created in the resistance element. It is recommended to follow common design practices for power semiconductors that ensure the junction temperature is maintained within thermal limits by using large pad surfaces, thermal vias, heavier copper weights, internal layers as well as other thermal spreading features. The thermal resistance values provided function in the same manner as junction to terminal temperature

DERATING - AMBIENT TEMPERATURE

DERATING - TERMINAL TEMPERATURE


Example: WSLP4026 0.0005 Ω, 0.001 Ω

PULSE CAPABILITY

www.vishay.com/resistors/power-metal-strip-calculator

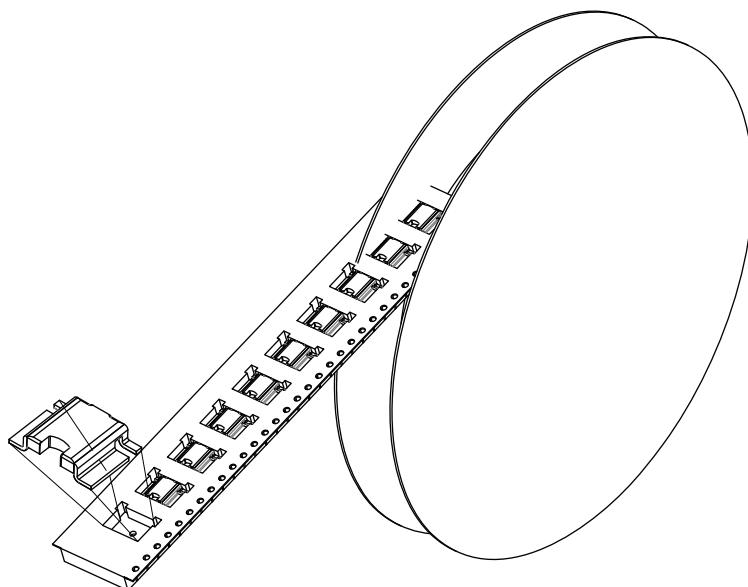
PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal shock	-55 °C to +150 °C, 1000 cycles, 15 min at each extreme	± 0.5 %
Low temperature operation	-65 °C for 24 h	± 0.5 %
High temperature exposure	1000 h at +170 °C	± 1.0 %
Bias humidity	+85 °C, 85 % RH, 10 % bias, 1000 h	± 0.5 %
Mechanical shock	100 g's for 6 ms, 5 pulses	± 0.5 %
Vibration	Frequency varied 10 Hz to 2000 Hz in 1 min, 3 directions, 12 h	± 0.5 %
Load life	1000 h at +70 °C, 1.5 h "ON", 0.5 h "OFF"	± 1.0 %
Resistance to solder heat	3 x at 250 °C ± 5 °C for 30 s ± 5 s	± 0.5 %
Moisture resistance	MIL-STD-202, method 106, 0 % power, 7b not required	± 0.5 %

PACKAGING (1)				
MODEL	REEL			
	TAPE WIDTH	DIAMETER	PIECES/REEL	CODE
WSLP4026	24 mm / embossed plastic	330 mm / 13"	1500	EA

Notes

- Embossed carrier tape per EIA-481

(1) Additional packaging details at www.vishay.com/doc?20051

REEL ORIENTATION

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