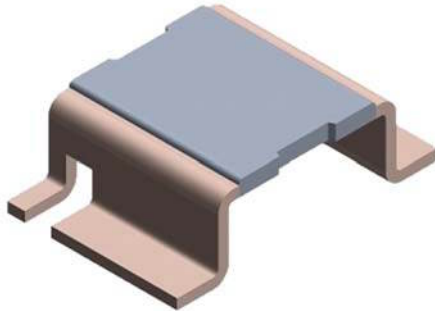


# Power Metal Strip® Resistors, High Temperature (275 °C), High Power, Low Value, Surface Mount, 4-Terminal



## FEATURES

- 4-terminal design allows for 1 % tolerance down to 0.002 Ω
- High power-to-footprint 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 nickel-chrome resistive element with low TCR (< 20 ppm/°C)
- Very low inductance 0.5 nH to 5 nH
- Low thermal EMF (< 3 μV/°C)
- AEC-Q200 qualified available <sup>(1)</sup>
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

 AUTOMOTIVE  
GRADE  
Available

**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**  
**GREEN**  
(5-2008)

### Note

- <sup>(1)</sup> 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 ± %	RESISTANCE VALUE RANGE Ω	RESISTANCE VALUES CURRENTLY AVAILABLE <sup>(2)</sup> Ω	WEIGHT (typical) g/1000 pieces
WSLT4026	4026	3.0	1.0	0.3m to 5m	2m, 3m, 4m, 5m	420

### Notes

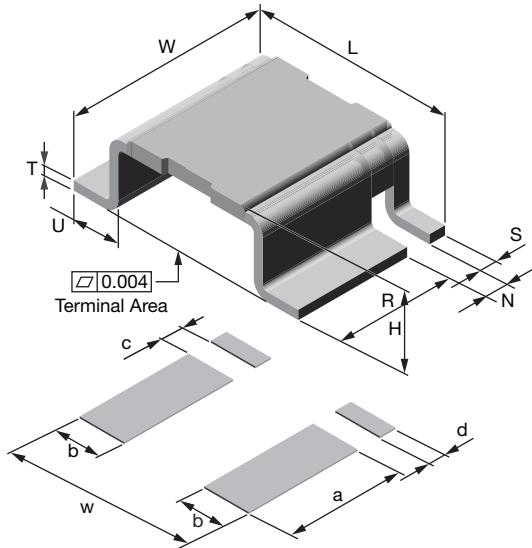
- Power rating depends on the max. temperature at the solder point, component placement density and the substrate material.
- Part marking: Model, value, tolerance, date code.
- <sup>(2)</sup> Other values may be available, contact factory.

TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/°C	± 75 over temperature of +20 °C to +60 °C
Operating temperature range	°C	-65 to +275
Maximum continuous current	V	$(P \times R)^{1/2}$

GLOBAL PART NUMBER INFORMATION																	
Global Part Numbering: WSLT40265L000FEA (WSLT4026, 0.005 Ω, ± 1 %)																	
W	S	L	T	4	0	2	6	5	L	0	0	0	F	E	A		
GLOBAL MODEL		RESISTANCE VALUE			TOLERANCE CODE			PACKAGING CODE			SPECIAL						
WSLT4026		L = mΩ 2L000 = 0.002 Ω 3L000 = 0.003 Ω 4L000 = 0.004 Ω 5L000 = 0.005 Ω			F = ± 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	R (REF.)	S	T	U	N
WSLT4026	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)	0.198 (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 in inches (millimeters)				
	a	b	c	d	w
WSLT4026	0.220 (5.6)	0.096 (2.44)	0.035 (0.89)	0.035 (0.89)	0.290 (7.4)

MODEL	RESISTANCE VALUE (mΩ)	ELEMENT MATERIAL
WSLT4026	2.0	Ni-Cr
	3.0	Ni-Cr
	4.0	Ni-Cr
	5.0	Ni-Cr

**DERATING**


PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal shock	-55 °C to +150 °C, 1000 cycles, 15 min at each extreme	± (0.5 %) ΔR
Short time overload	0.3 mΩ, 0.5 mΩ, 2 mΩ and 3 mΩ - 5x rated power for 5 s 4 mΩ and 5 mΩ - 3x 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 +275 °C	± (1.0 %) 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"	± (1.0 %) 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, 7b not required	± (0.5 %) ΔR

PACKAGING				
MODEL	REEL			
	TAPE WIDTH	DIAMETER	PIECES/REEL	CODE
WSLT4026	16 mm/embossed plastic	330 mm/13"	1500	EA

**Note**

- Embossed Carrier Tape per EIA-481.



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