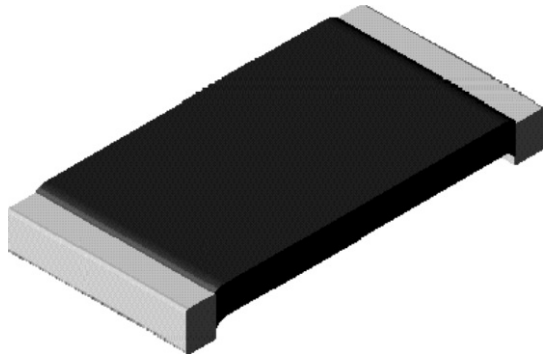


Power Metal Strip® Resistors

High Temperature (275 °C), High Power (1 W), Low Value (down to 0.01 Ω), Surface Mount



FEATURES

- Ideal for all types of current sensing, voltage division and pulse applications including switching and linear power supplies, instruments and power amplifiers
- Proprietary processing technique produces extremely low resistance values
- Specially selected and stabilized materials allow for high temperature derating (to + 275 °C) and high power ratings (2 x standard WSL rating)
- All welded construction
- Solid metal Nickel-Chrome alloy resistive element with low TCR (< 20 ppm/°C)
- Very low inductance (< 5 nH)
- Excellent frequency response to 50 MHz
- Low thermal EMF (< 3 μV/°C)
- Compliant to RoHS directive 2002/95/EC



RoHS
COMPLIANT
GREEN
(5-2009)**

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	POWER RATING $P_{70\text{ °C}}$ W	RESISTANCE RANGE Ω		WEIGHT (typical) g/1000 pieces
		± 0.5 %	± 1.0 %	
WSLT2010...18	1.0	0.01 to 0.50	0.01 to 0.50	38.9

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	WSLT2010-18
Temperature Coefficient	ppm/°C	± 75
Inductance	nH	< 5
Operating Temperature Range	°C	- 65 to + 275
Maximum Continuous Current	A	$(P/R)^{1/2}$

GLOBAL PART NUMBER INFORMATION

NEW GLOBAL PART NUMBERING: WSLT2010R0100FEA18

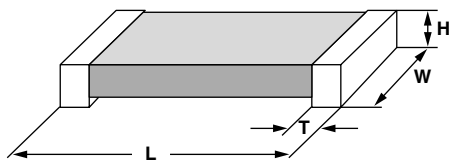
W S L T 2 0 1 0 R 0 1 0 0 F E A 1 8

GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING CODE	SPECIAL
WSLT2010	R = Decimal R0100 = 0.01 Ω	D = ± 0.5 % F = ± 1.0 %	EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk	18 = "High Power" option

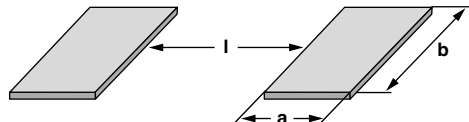
** Please see document "Vishay Material Category Policy": www.vishay.com/doc?999902

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 High Temperature (275 °C), High Power (1 W),
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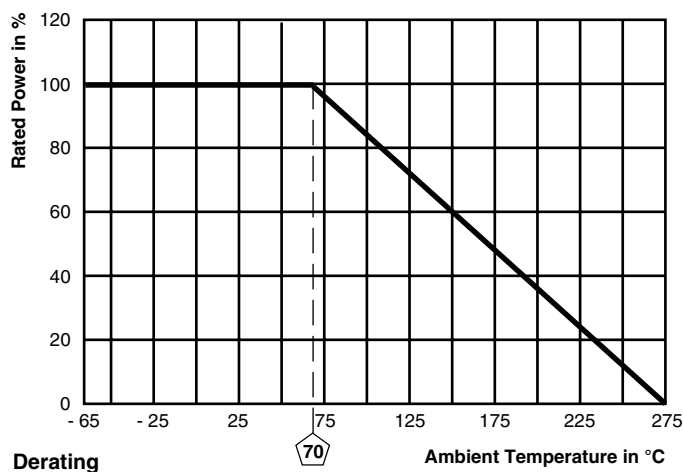
Vishay Dale

DIMENSIONS


MODEL	DIMENSIONS in inches [millimeters]			
	L	W	H	T
WSLT2010...18	0.200 ± 0.010 [5.08 ± 0.254]	0.100 ± 0.010 [2.54 ± 0.254]	0.025 ± 0.010 [0.635 ± 0.254]	0.020 ± 0.010 [0.508 ± 0.254]



MODEL	SOLDER PAD DIMENSIONS in inches [millimeters]		
	a	b	l
WSLT2010...18	0.055 [1.40]	0.120 [3.05]	0.130 [3.30]



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	5 × 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	± 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 at 70 °C	1000 h, 1.5 h "ON", 0.5 h "OFF"	± 1.0 % ΔR
Load Life at 150 °C	1000 h, 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	± 1.0 % ΔR

PACKAGING				
MODEL	REEL			
	TAPE WIDTH	DIAMETER	PIECES/REEL	CODE
WSLT2010...18	12 mm/Embossed Plastic	178 mm/7"	4000	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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