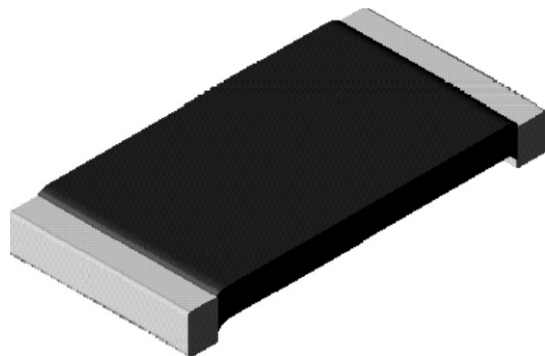


## Power Metal Strip® Resistors High Temperature (275 °C), High Power (1 W), Low Value (down to 0.01 Ω), Surface Mount



### 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 $P_{70\text{ }^\circ\text{C}}$ W	RESISTANCE RANGE $\Omega$		WEIGHT (typical) g/1000 pieces
		$\pm 0.5\%$	$\pm 1.0\%$	
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	$\pm 75$
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 = $\pm 0.5\%$ F = $\pm 1.0\%$		EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk				18 = "High Power" option					

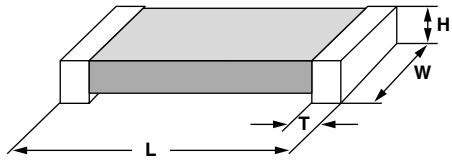
\*\* Please see document "Vishay Material Category Policy": [www.vishay.com/doc?99902](http://www.vishay.com/doc?99902)



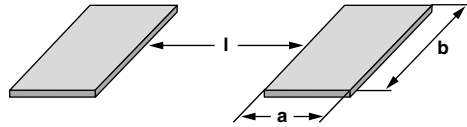
Power Metal Strip® Resistors  
 High Temperature (275 °C), High Power (1 W),  
 Low Value (down to 0.01 Ω), Surface Mount

Vishay Dale

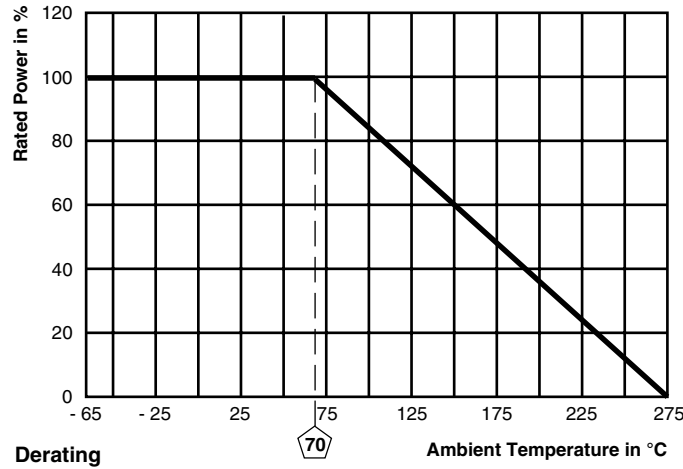
**DIMENSIONS**



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



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

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