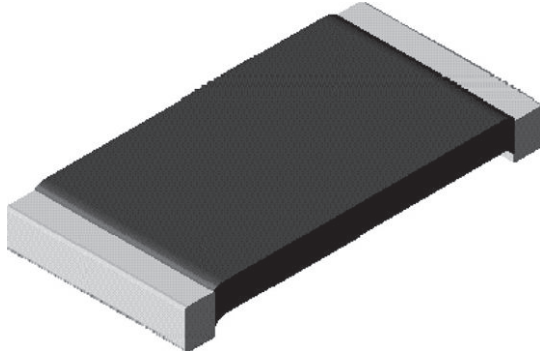


## Power Metal Strip® Resistors, High Temperature (275 °C), Low Value (down to 0.01 Ohm), Surface Mount



### 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
- All welded construction
- Specially selected and stabilized materials allow for high temperature derating (to + 275 °C)
- 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
- AEC-Q200 qualified available <sup>(1)</sup>

 AUTOMOTIVE  
GRADE  
Available

**RoHS**  
COMPLIANT  
**GREEN**  
(5-2009)\*\*

### Note

<sup>(1)</sup> Flame retardance test may not be applicable to some resistor technologies.

### Note

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

### STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{70^{\circ}\text{C}}$ W	TOLERANCE ± %	RESISTANCE VALUE RANGE Ω	WEIGHT (typical) g/1000 pieces
WSLT2512	2512	1.0	0.5, 1.0	0.01 to 0.50	63.6

### Note

- Part marking: DALE, value, tolerance code.

### TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	RESISTOR CHARACTERISTICS
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

Global Part Numbering example: WSLT2512R0100FEA

W	S	L	T	2	5	1	2	R	0	1	0	0	F	E	A		
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--

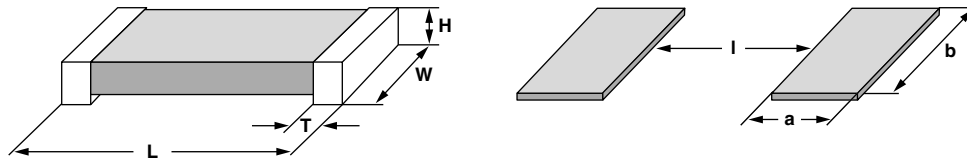
GLOBAL MODEL
<b>WSLT2512</b>

RESISTANCE VALUE
<b>R</b> = Decimal <b>R0100</b> = 0.01 Ω

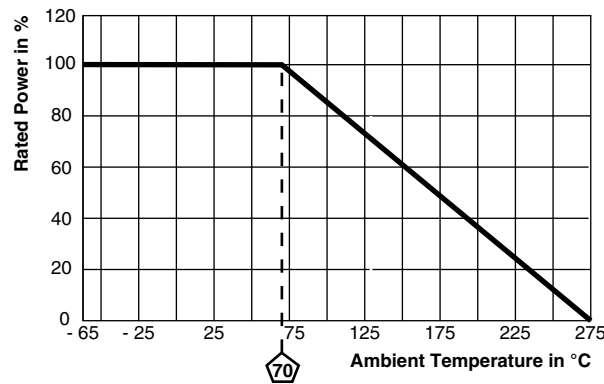
TOLERANCE CODE
<b>D</b> = ± 0.5 % <b>F</b> = ± 1.0 %

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

SPECIAL
Reserved for future specials

**DIMENSIONS** in inches (millimeters)


MODEL	DIMENSIONS				SOLDER PAD DIMENSIONS		
	L	W	H	T	a	b	l
WSLT2512	0.250 ± 0.010 (6.35 ± 0.254)	0.125 ± 0.010 (3.18 ± 0.254)	0.025 ± 0.010 (0.635 ± 0.254)	0.030 ± 0.010 (0.762 ± 0.254)	0.065 (1.65)	0.145 (3.68)	0.160 (4.06)

**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	5 x 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 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
WSLT2512	12 mm/embossed plastic	178 mm/7"	2000	EA

**Note**

- Embossed Carrier Tape per EIA-481.



## Disclaimer

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## Material Category Policy

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**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**

**Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.**



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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