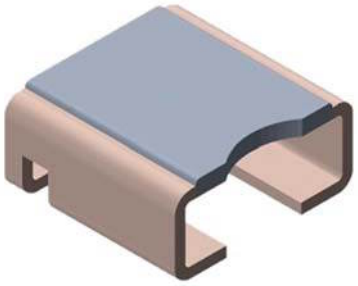
Power Metal Strip® Resistors, Very High Power (to 7 W), Low Value (down to 0.0003 Ω), Surface Mount



FEATURES

AUTOMOTIVE GRADE Available

Pb-free

RoHS COMPLIANT

HALOGEN FREE

GREEN (5-2008)

- High power to foot print 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 0.0003 Ω
- Specially selected and stabilized materials allow for high power rating (to 7 W)
- All welded construction
- Solid metal nickel-chrome or manganese-copper alloy 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 (1)
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Note

(1) Flame retardance test may not be applicable to some resistor technologies.

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	SIZE	POWER RATING $P_{70\,°C}$ W	TOLERANCE ± %	RESISTANCE VALUE RANGE Ω	RESISTANCE VALUES CURRENTLY AVAILABLE (2) Ω	WEIGHT (typical) g/1000 pieces
WSLP2726	2726	5.0	1.0, 5.0	2m to 4m	2m, 3m, 4m	420
WSLP2726	2726	7.0	1.0, 5.0	0.3m to 1m	0.3m, 0.5m, 0.7m, 1m	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.

(2) Other values may be available, contact factory.

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/°C	± 75 for 0.5 mΩ to 4 mΩ, ± 110 for 0.3 mΩ
Element TCR	ppm/°C	< 20
Operating temperature range	°C	-65 to +170
Maximum working voltage	V	$(P \times R)^{1/2}$

GLOBAL PART NUMBER INFORMATION

Global Part Numbering: WSLP2726L5000FEA (WSLP2726, 0.0005 Ω, ± 1 %)

W	S	L	P	2	7	2	6	L	5	0	0	0	F	E	A		

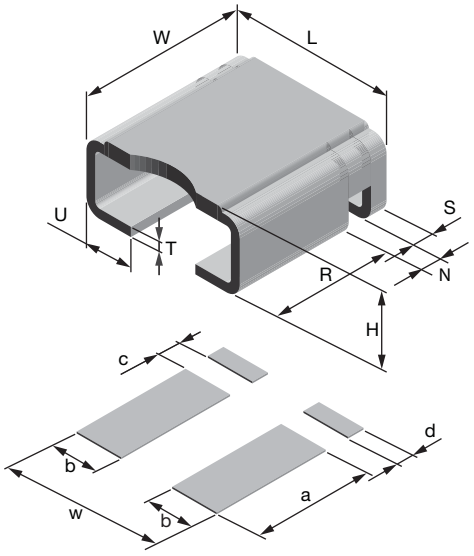
GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING CODE	SPECIAL
WSLP2726	**L** = mΩ **L5000** = 0.0005 Ω **L7000** = 0.0007 Ω **1L000** = 0.0010 Ω **2L000** = 0.0020 Ω	**F** = ± 1.0 % **J** = ± 5.0 %	**EA** = Lead (Pb)-free, tape/reel **EK** = Lead (Pb)-free, bulk	(Dash number) (Up to 2 digits) From **1 to 99** as applicable

For technical questions, contact: ww2bresistors@vishay.com

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DIMENSIONS

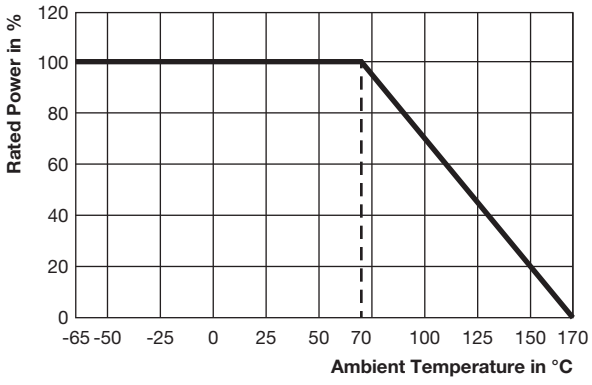
MODEL	DIMENSIONS in inches (millimeters)							
	L	W	H	R (REF.)	S	T	U	N
WSLP2726	0.272 ± 0.008 (6.9 ± 0.2)	0.260 + 0.012/- 0.008 (6.6 + 0.3/- 0.2)	Please see table below	0.198 (5.0)	0.028 ± 0.004 (0.7 ± 0.1)	0.016 ± 0.002 (0.4 ± 0.05)	0.078 ± 0.004 (2.0 ± 0.1)	0.039 ± 0.006 (0.99 ± 0.15)



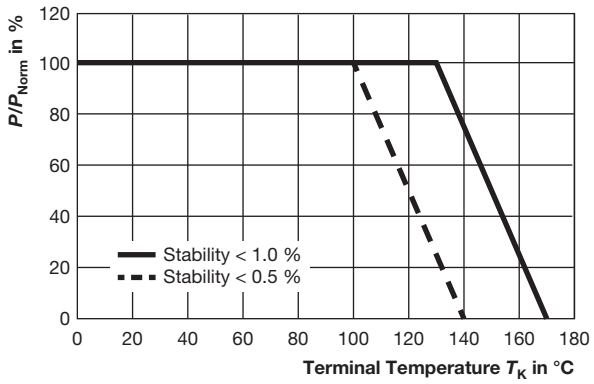
MODEL	SOLDER PAD DIMENSIONS in inches (millimeters)				
	a	b	c	d	w
WSLP2726	0.220 (5.6)	0.096 (2.44)	0.035 (0.89)	0.035 (0.89)	0.290 (7.4)

MODEL	RESISTANCE VALUE (mΩ)	ELEMENT MATERIAL	HEIGHT H
WSLP2726	0.3	Mn-Cu	0.141 ± 0.008 (3.58 ± 0.2)
WSLP2726	0.5	Mn-Cu	0.116 ± 0.008 (2.95 ± 0.2)
WSLP2726	0.7	Mn-Cu	0.111 ± 0.008 (2.82 ± 0.2)
WSLP2726	1.0	Mn-Cu	0.1055 ± 0.008 (2.68 ± 0.2)
WSLP2726	2.0	Ni-Cr	0.114 ± 0.008 (2.9 ± 0.2)
WSLP2726	3.0	Ni-Cr	0.108 ± 0.008 (2.74 ± 0.2)
WSLP2726	4.0	Ni-Cr	0.1046± 0.008 (2.66 ± 0.2)

DERATING - AMBIENT TEMPERATURE



DERATING - TERMINAL TEMPERATURE



Example: WSLP2726 0.0005 Ω, 0.001 Ω

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PERFORMANCE		
TEST	**CONDITIONS OF TEST**	**TEST LIMITS**
Thermal shock	-55 °C to +150 °C, 1000 cycles, 15 min at each extreme	± (0.5 %) Δ*R*
Low temperature operation	65 °C for 45 min	± (0.5 %) Δ*R*
High temperature exposure	1000 h at + 170 °C	± (1.0 %) Δ*R*
Bias humidity	85 °C, 85 % RH, 10 % bias, 1000 h	± (0.5 %) Δ*R*
Mechanical shock	100 *g*'s for 6 ms, 5 pulses	± (0.5 %) Δ*R*
Vibration	Frequency varied 10 Hz to 2000 Hz in 1 min, 3 directions, 12 h	± (0.5 %) Δ*R*
Load life	1000 h at +70 °C, 1.5 h "ON", 0.5 h "OFF"	± (1.0 %) Δ*R*
Resistance to solder heat	+260 °C solder, 10 s to 12 s dwell, 25 mm/s emergence	± (0.5 %) Δ*R*
Moisture resistance	MIL-STD-202, method 106, 0 % power, 7b not required	± (0.5 %) Δ*R*

PACKAGING				
MODEL	**REEL**			
	TAPE WIDTH	**DIAMETER**	**PIECES/REEL**	**CODE**
WSLP2726	16 mm/embossed plastic	330 mm/13"	1500	EA

Note

- Embossed carrier tape per EIA-481.

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