



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

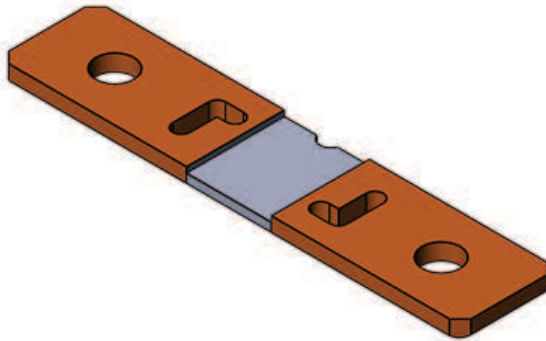
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Power Metal Strip® Shunt Resistor, Low TCR (Down to $< \pm 10 \text{ ppm}/^\circ\text{C}$), Very Low Value (100 $\mu\Omega$, 500 $\mu\Omega$, and 1000 $\mu\Omega$)



FEATURES

- High power to resistor size ratio
- Proprietary processing technique produces extremely low resistance values
- All welded construction
- Solid metal nickel-chrome alloy resistive element with unique design for low TCR (down to $\pm 10 \text{ ppm}/^\circ\text{C}$)
- Very low inductance ($< 5 \text{ nH}$)
- Low thermal EMF (as low as $< 1.25 \mu\text{V}/^\circ\text{C}$)
- PATENT(S): www.vishay.com/patents
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

DESIGN SUPPORT TOOLS click logo to get started



STANDARD ELECTRICAL SPECIFICATIONS						
GLOBAL MODEL	SIZE	POWER RATING $P_{70^\circ\text{C}}$ W	TOLERANCE $\pm \%$	RESISTANCE VALUE RANGE Ω	RESISTANCE VALUES CURRENTLY AVAILABLE ⁽¹⁾ Ω	WEIGHT (typical) g
WSBS8518...34	8518	36	5, 10	100 μ to 1000 μ	100 μ	36.0
WSBS8518...34	8518	25	5, 10	100 μ to 1000 μ	500 μ	33.4
WSBS8518...34	8518	20	5, 10	100 μ to 1000 μ	1000 μ	31.3

Note

⁽¹⁾ Other values may be available, contact factory

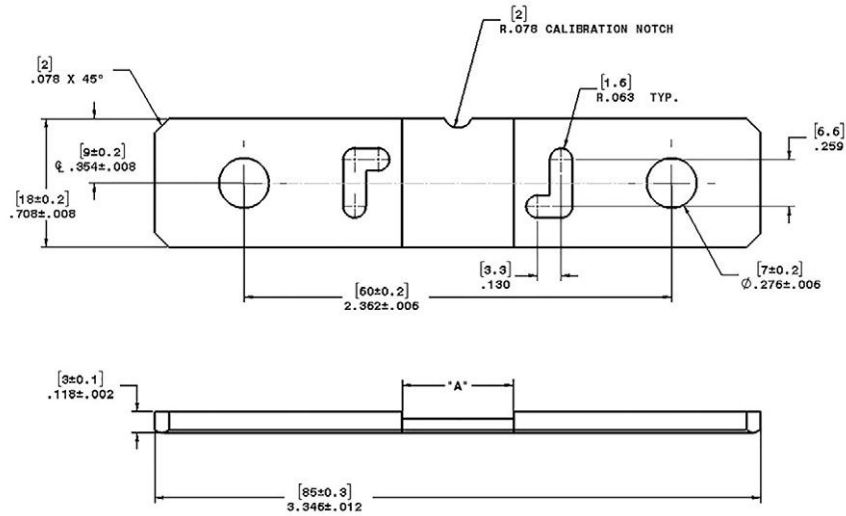
TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature coefficient	ppm/ $^\circ\text{C}$	± 65 for 100 $\mu\Omega$
		± 10 for 500 $\mu\Omega$
		± 25 for 1000 $\mu\Omega$
Operating temperature range	$^\circ\text{C}$	-65 to +170
Thermal EMF	$\mu\text{V}/^\circ\text{C}$	< 1.25
Inductance	nH	< 5
Maximum current rating	A	$(P/R)^{1/2}$

GLOBAL PART NUMBER INFORMATION																
GLOBAL PART NUMBERING: WSBS8518L5000JT34 (WSBS8518...34, 0.0005 Ω , $\pm 5 \%$, tray pack)																
W	S	B	S	8	5	1	8	L	5	0	0	0	J	T	3	4
GLOBAL MODEL			RESISTANCE VALUE			TOLERANCE CODE		PACKAGING CODE				SPECIAL				
WSBS8518			L = m Ω L1000 = 0.000100 Ω L5000 = 0.000500 Ω L10000 = 0.001000 Ω			J = $\pm 5 \%$ K = $\pm 10 \%$		K = bulk pack T = tray pack				34 = low TCR				

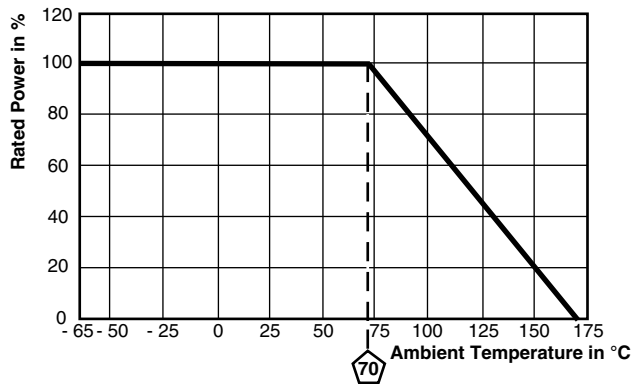
PATENT(S): www.vishay.com/patents

This Vishay product is protected by one or more United States and International patents.

DIMENSIONS in inches (millimeters)



DERATING



TOLERANCES ON DECIMALS
 $.xxx \pm 0.005$ [$.x \pm 0.1$]
 UNLESS OTHERWISE LISTED

RESISTANCE VALUE ($\mu\Omega$)	ELEMENT MATERIAL	A REFERENCE
100	Ni-Cr	0.120 [3.05]
500	Ni-Cr	0.615 [15.62]
1000	Ni-Cr	0.900 [22.86]

PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST LIMITS
Thermal shock	-55 °C to +150 °C, 1000 cycles, 15 min at each extreme	$\pm 0.5\% \Delta R$
Short time overload	5x rated power for 5 s	$\pm 0.5\% \Delta R$
Low temperature storage	-65 °C for 24 h	$\pm 0.2\% \Delta R$
High temperature exposure	1000 h at +170 °C	$\pm 1.0\% \Delta R$
Bias humidity	+85 °C, 85 % RH, 10 % bias, 1000 h	$\pm 0.5\% \Delta R$
Mechanical shock	100 g's for 6 ms, 5 pulses	$\pm 0.2\% \Delta R$
Vibration	Frequency varied 10 Hz to 2000 Hz in 1 min, 3 directions, 12 h	$\pm 0.2\% \Delta R$
Load life	1000 h at +70 °C, 1.5 h "ON", 0.5 h "OFF"	$\pm 1.0\% \Delta R$
Moisture resistance	MIL-STD-202, method 106, 0 % power, 7b not required	$\pm 0.2\% \Delta R$



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