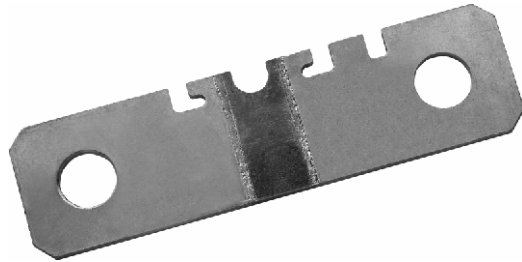


Power Metal Strip® Meter Shunt Resistor, Very Low Value (down to 0.00010 Ω)



FEATURES

- High power to resistor size ratio
- 4-terminal (Kelvin) connection design
- Proprietary processing technique produces extremely low resistance values
- All welded construction
- Very low inductance (< 0.5 nH)
- Low thermal EMF (< 3 μV/°C)
- Compliant to RoHS directive 2002/95/EC



STANDARD ELECTRICAL SPECIFICATIONS						
GLOBAL MODEL	SIZE	POWER RATING <i>P</i> _{70 °C} W	TOLERANCE %	RESISTANCE VALUE RANGEΩ	RESISTANCE VALUES CURRENTLY AVAILABLE ⁽¹⁾ Ω	WEIGHT (typical)g/1000 pieces
WSMS5515	5515	3.0	5.0	50μ to 1000μ	100μ, 160μ, 200μ, 250μ, 300μ, 500μ	7800

Note

(1) Other values may be available, contact factory

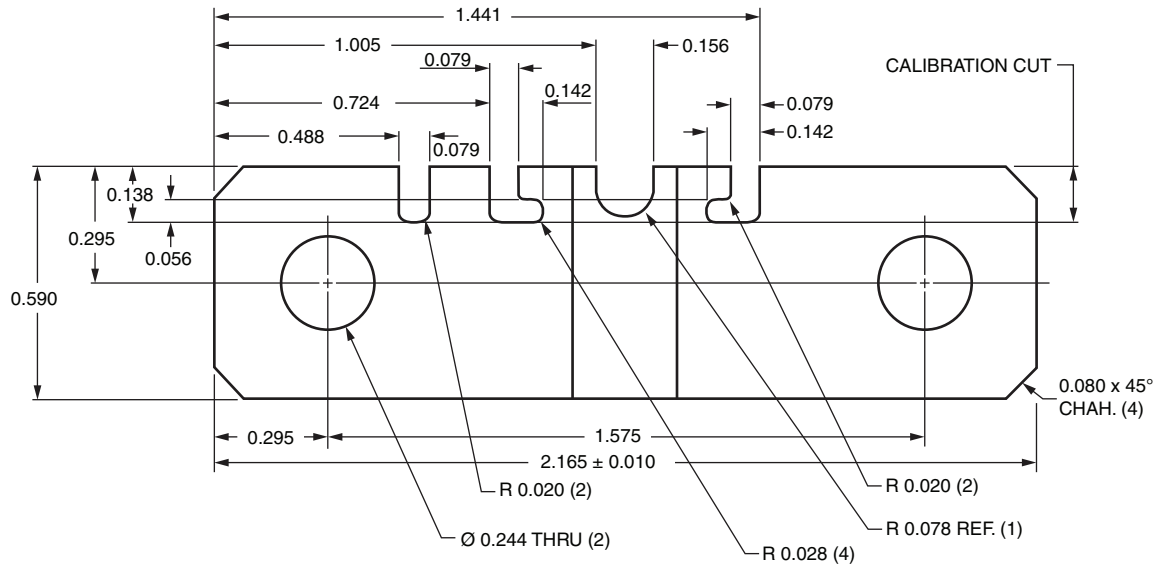
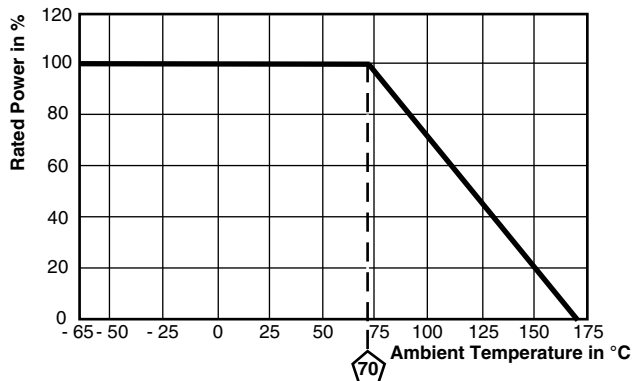
TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/°C	± 325 for 100 μΩ, ± 225 for 160 μΩ, 200 μΩ, and 250 μΩ, ± 175 for 300 μΩ to 500 μΩ
Operating Temperature Range	°C	- 65 to + 170
Maximum Current Rating	A	(<i>P/R</i>) ^{1/2}

GLOBAL PART NUMBER INFORMATION																
GLOBAL PART NUMBERING: WSMS5515L2500JK (WSMS5515, 0.00025 Ω, ± 5 %)																
W	S	M	S	5	5	1	5	L	2	5	0	0	J	K		
GLOBAL MODEL WSMS5515		RESISTANCE VALUE L = mΩ L1000 = 0.00010 Ω L1600 = 0.00016 Ω L2000 = 0.00020 Ω L2500 = 0.00025 Ω L3000 = 0.00030 Ω L5000 = 0.00050 Ω				TOLERANCE CODE J = ± 5.0 %		PACKAGING CODE K = Bulk pack			SPECIAL (Dash number) (Up to 2 digits) From 1 to 99 as applicable					

** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

**Power Metal Strip® Meter Shunt Resistor,
Very Low Value (down to 0.00010 Ω)**

Vishay Dale

DIMENSIONS in inches

DERATING

 TOLERANCES ON DECIMALS
XXX ± 0.005

RESISTANCE VALUE (μΩ)	RESISTOR THICKNESS (inches)	ELEMENT MATERIAL
100	0.033	Mn-Cu
160	0.051	Mn-Cu
200	0.051	Mn-Cu
250	0.033	Mn-Cu
300	0.033	Mn-Cu
500	0.059	Fe-Cr

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 + 170 °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	1000 h at + 70 °C, 1.5 h "ON", 0.5 h "OFF"	± 1.0 % ΔR
Moisture Resistance	MIL-STD-202, method 106, 0 % power, 7b not required	± 0.5 % ΔR



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