



POWER METAL STRIP® RESISTOR

WSMS5515



3-Watt Power Metal Strip® Meter Shunt Resistor

FEATURES

- Very low resistance values: 100 $\mu\Omega$, 160 $\mu\Omega$, 200 $\mu\Omega$, 250 $\mu\Omega$, 300 $\mu\Omega$, 500 $\mu\Omega$
- 3-Watt power capability in 5515 package
- Offers 4-terminal (Kelvin) connection design
- All-welded construction

APPLICATIONS

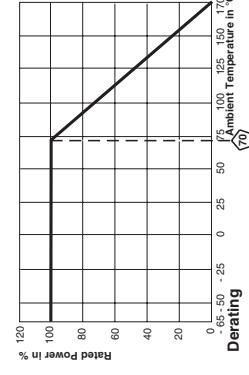
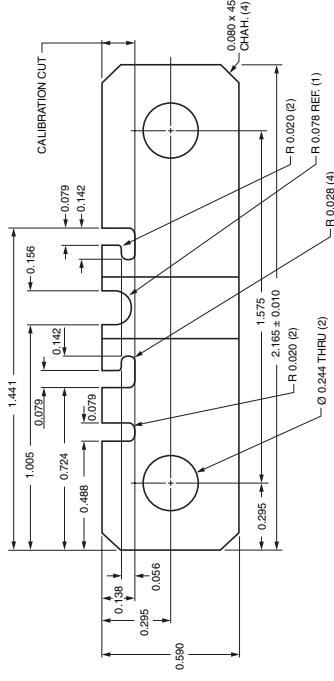
- Industrial Power Meters (three-phase and polyphase)
- Consumer Power Meters (single-phase and polyphase)

Datasheet is available on our web site at www.vishay.com
for WSMS5515 - <http://www.vishay.com/doc?30135>

Power Metal Strip® Meter Shunt Resistor, Very Low Value (down to 0.00016 Ω)

FEATURES

- High power to resistor size ratio
- 4-Terminal (Kelvin) connection design
- Proprietary processing technique produces extremely low resistance values
- All welded construction
- RoHS compliant, lead (Pb)-free construction
- Very low inductance (< 0.5 nH)
- Excellent frequency response to 50 MHz
- Low thermal EMF (< 3 μV/°C)

DIMENSIONS in inches

 TOLERANCES ON DECIMALS
XXX ± 0.005

STANDARD ELECTRICAL SPECIFICATIONS	
GLOBAL MODEL	WEIGHT (Typical) g
WSMS5515	7.8

TECHNICAL SPECIFICATIONS	
PARAMETER	UNIT
Temperature Coefficient	ppm/°C
Operating Temperature Range	°C
Maximum Current Rating	A

RESISTOR VALUE (μΩ)	RESISTOR THICKNESS (Inches)	ELEMENT MATERIAL
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

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 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 - 99 as applicable
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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 48 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 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

Revision 15-Nov-07

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