

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)



RoHS
COMPLIANT

| STANDARD ELECTRICAL SPECIFICATIONS | | | | |
|------------------------------------|--|----------------|-------------------------------------|--------------------------|
| GLOBAL MODEL | POWER RATING <i>P</i> _{70 °C} W | TOLERANCE % | RESISTANCE VALUE AVAILABLE μΩ | WEIGHT (Typical) g |
| WSMS5515 | 3.0 | 5.0 | 160, 200, 250, 300, 500 | 7.8 |

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

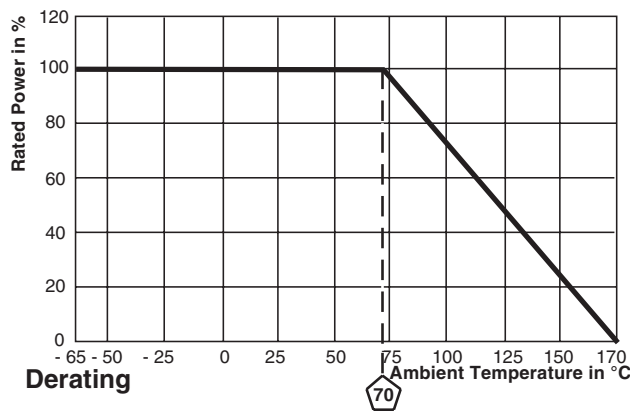
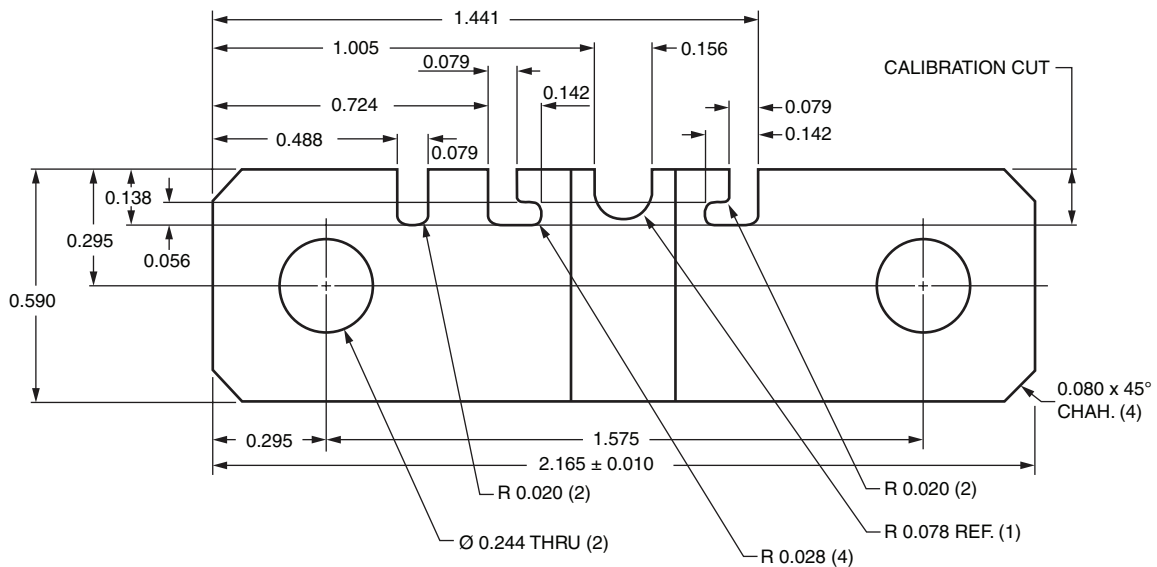
| GLOBAL PART NUMBER INFORMATION | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|----------------|---|----------------|---|---|---|--|---|---|--|--|
| GLOBAL PART NUMBERING: WSMS5515L2500JK (WSMS5515, 0.00025 Ω, ± 5 %) | | | | | | | | | | | | | | | | |
| W | S | M | S | 5 | 5 | 1 | 5 | L |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



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

Vishay Dale

DIMENSIONS in inches



TOLERANCES ON DECIMALS
XXX ± 0.005

| RESISTANCE 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 |

| 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 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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Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9