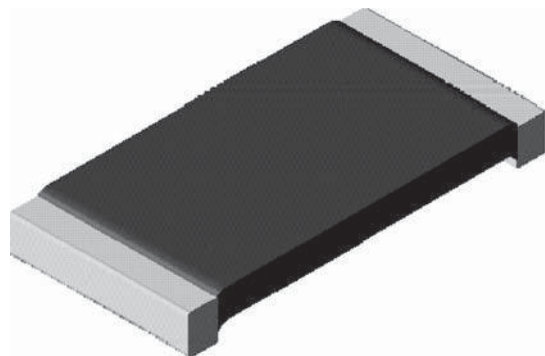


Improved Stability (0.25 % and 0.5 %), Power Metal Strip® Resistors Low Value (0.01 Ω to 0.1 Ω), Surface Mount



FEATURES

- Current sensing in high-temperature (+ 125 °C) applications
- Greater stability with maximum resistance change of 0.25 % or 0.5 % through 2000 h workload
- 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 (0.01 Ω to 0.1 Ω)
- All welded construction
- Solid metal nickel-chrome resistive element with low TCR (< 20 ppm/°C)
- Very low inductance 0.5 nH to 2 nH
- Excellent frequency response to 50 MHz
- Low thermal EMF (< 3 μV/°C)
- AEC-Q200 qualified ⁽¹⁾
- Compliant to RoHS Directive 2002/95/EC

AUTOMOTIVE GRADE



RoHS COMPLIANT

GREEN (5-2009)**

Note

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

STANDARD ELECTRICAL SPECIFICATIONS

| GLOBAL MODEL | SIZE | POWER RATING $P_{70^{\circ}\text{C}}$ W | TOLERANCE ± % | RESISTANCE VALUE RANGE Ω | WEIGHT (typical) g/1000 pieces |
|--------------|------|---|------------------|-----------------------------|-----------------------------------|
| WSLS2512 | 2512 | 1.0 | 0.5, 1.0, 5.0 | 0.01 to 0.1 | 63.6 |

Note

- Part marking: Value, RTC/stability code.

TECHNICAL SPECIFICATIONS

| PARAMETER | UNIT | RESISTOR CHARACTERISTICS |
|-----------------------------|--------|--------------------------|
| Temperature coefficient | ppm/°C | ± 75 |
| Operating temperature range | °C | - 65 to + 170 |
| Maximum working voltage | V | $(P \times R)^{1/2}$ |

GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: WSLS2512R0100FHEA

| | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|--|--|--|
| W | S | L | S | 2 | 5 | 1 | 2 | R | 0 | 1 | 0 | 0 | F | H | E | A | | |
| GLOBAL MODEL | | | | RESISTANCE VALUE | | | TOLERANCE CODE | | | RTC/STABILITY | | | PACKAGING CODE | | | SPECIAL | | |
| WSLS2512 | | | | R = Decimal R0100 = 0.01 Ω | | | D = ± 0.5 % F = ± 1.0 % J = ± 5.0 % | | | G = 75 ppm, 0.25 % stability H = 75 ppm, 0.5 % stability | | | EA = Lead (Pb)-free, tape/reel EK = Lead (Pb)-free, bulk | | | (Dash number) (up to 2 digits) From 1 to 99 as applicable | | |

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

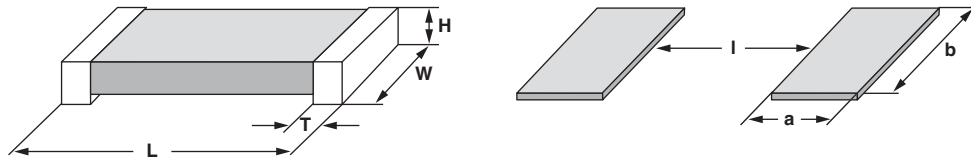


WSLS2512, Improved Stability

Improved Stability (0.25 % and 0.5 %),
Power Metal Strip® Resistors
Low Value (0.01 Ω to 0.1 Ω), Surface Mount

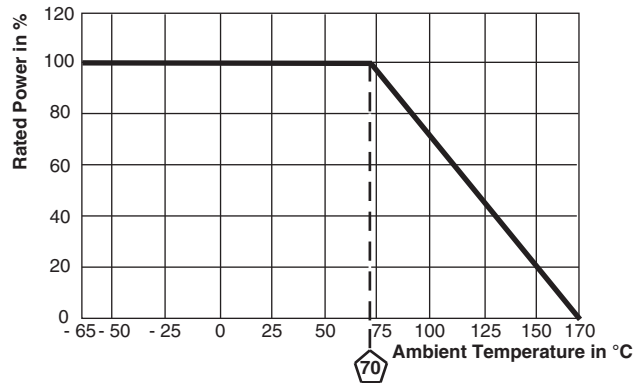
Vishay Dale

DIMENSIONS in inches (millimeters)



| MODEL | DIMENSIONS | | | | SOLDER PAD DIMENSIONS | | |
|----------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|-----------------------|-----------------|-----------------|
| | L | W | H | T | a | b | l |
| WSLS2512 | 0.250 ± 0.010 (6.35 ± 0.254) | 0.125 ± 0.010 (3.18 ± 0.254) | 0.025 ± 0.010 (0.635 ± 0.254) | 0.030 ± 0.010 (0.762 ± 0.254) | 0.065 (1.65) | 0.145 (3.68) | 0.160 (4.06) |

DERATING



| PERFORMANCE | | | |
|---------------------------|--|------------------------|------------|
| TEST | CONDITIONS OF TEST | TEST LIMITS | |
| | | 0.25 % | 0.5 % |
| Thermal shock | - 55 °C to + 150 °C, 1000 cycles, 15 min at each extreme | ± (0.5 % + 0.005 Ω) ΔR | |
| Short time overload | 5 x rated power for 5 s for WSL2512 size or smaller | ± (0.5 % + 0.005 Ω) ΔR | |
| Low temperature operation | - 65 °C for 45 min | ± (0.5 % + 0.005 Ω) ΔR | |
| High temperature exposure | 1000 h at + 170 °C | ± (1.0 % + 0.005 Ω) ΔR | |
| Bias humidity | + 85 °C, 85 % RH, 10 % bias, 1000 h | ± (0.5 % + 0.005 Ω) ΔR | |
| Mechanical shock | 100 g's for 6 ms, 5 pulses | ± (0.5 % + 0.005 Ω) ΔR | |
| Vibration | Frequency varied 10 Hz to 2000 Hz in 1 min, 3 directions, 12 h | ± (0.5 % + 0.005 Ω) ΔR | |
| Load life | 2000 h at 70 °C, 1.5 h "ON", 0.5 h "OFF" | ± 0.25 % ΔR | ± 0.5 % ΔR |
| Resistance to solder heat | + 260 °C solder, 10 s to 12 s dwell, 25 mm/s emergence | ± (0.5 % + 0.005 Ω) ΔR | |
| Moisture resistance | MIL-STD-202, method 106, 0 % power, 7b not required | ± (0.5 % + 0.005 Ω) ΔR | |

| PACKAGING | | | | |
|-----------|------------------------|-----------|-------------|------|
| MODEL | REEL | | | |
| | TAPE WIDTH | DIAMETER | PIECES/REEL | CODE |
| WSLS2512 | 12 mm/embossed plastic | 178 mm/7" | 2000 | EA |

Note

- Embossed Carrier Tape per EIA-481.



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- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
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- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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