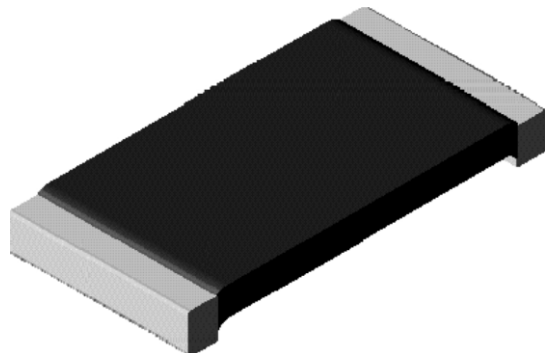


Power Metal Strip[®] Resistors, High Temperature (275 °C) Low Value (down to 0.01 Ω), Surface Mount



FEATURES

- Ideal for all types of current sensing, voltage division and pulse applications including switching and linear power supplies, instruments and power amplifiers
- Proprietary processing technique produces extremely low resistance values
- Specially selected and stabilized materials allow for high temperature derating (to + 275 °C)
- All welded construction
- Solid metal Nickel-Chrome alloy resistive element with low TCR (< 20 ppm/°C)
- Very low inductance (< 5 nH)
- Excellent frequency response to 50 MHz
- Low thermal EMF (< 3 μV/°C)



RoHS
COMPLIANT

| STANDARD ELECTRICAL SPECIFICATIONS | | | | |
|------------------------------------|---|------------------------------|-------------|-----------------------------------|
| GLOBAL MODEL | POWER RATING $P_{70\text{ }^\circ\text{C}}$ W | RESISTANCE RANGE Ω | | WEIGHT (Typical) g/1000 pcs |
| | | $\pm 0.5\%$ | $\pm 1.0\%$ | |
| WSLT2512 | 1.0 | 0.01 - 0.50 | 0.01 - 0.50 | 63.6 |

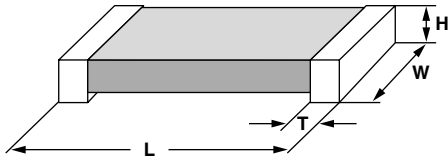
* Part Marking: DALE, Value, Tolerance Code

| TECHNICAL SPECIFICATIONS | | |
|-----------------------------|--------|---------------|
| PARAMETER | UNIT | WSLT2512 |
| Temperature Coefficient | ppm/°C | ± 75 |
| Inductance | nH | < 5 |
| Operating temperature range | °C | - 65/+ 275 |
| Max. Continuous Current | A | $(P/R)^{1/2}$ |

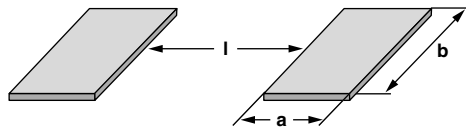
| GLOBAL PART NUMBER INFORMATION | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|------------------------------------|---|---|---|---|---|------------------------------|---|---|---|--|--|
| New Global Part Numbering: WSLT2512R0100FEA | | | | | | | | | | | | | | | | | |
| W | S | L | T | 2 | 5 | 1 | 2 | R | 0 | 1 | 0 | 0 | F | E | A | | |
| GLOBAL MODEL | | | RESISTANCE VALUE | | | TOLERANCE CODE | | | PACKING CODE | | | SPECIAL | | | | | |
| WSLT2512 | | | L = Milliohm* R = Decimal 4L000 = 0.004 Ω R0100 = 0.01 Ω * use "L" for resistance values < 0.01 Ω | | | D = $\pm 0.5\%$ F = $\pm 1.0\%$ | | | EA = Lead (Pb)-free, Tape/Reel EK = Lead (Pb)-free, Bulk | | | Reserved for future specials | | | | | |



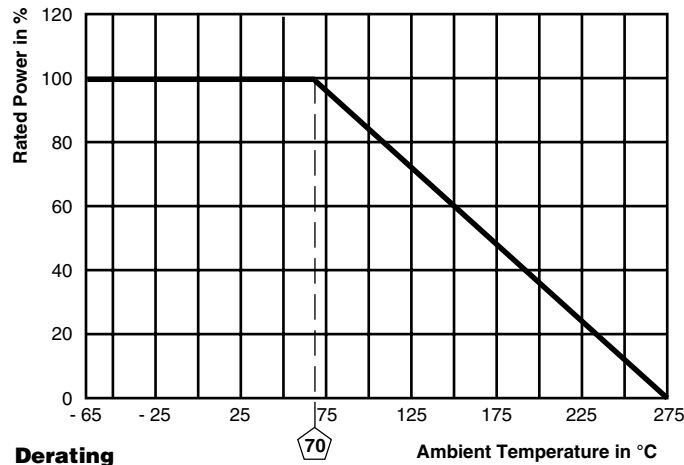
DIMENSIONS



| MODEL | DIMENSIONS in inches [millimeters] | | | |
|----------|------------------------------------|----------------|-----------------|-----------------|
| | L | W | H | T |
| WSLT2512 | 0.250 ± 0.010 | 0.125 ± 0.010 | 0.025 ± 0.010 | 0.030 ± 0.010 |
| | [6.35 ± 0.254] | [3.18 ± 0.254] | [0.635 ± 0.254] | [0.762 ± 0.254] |



| MODEL | SOLDER PAD DIMENSIONS in inches [millimeters] | | |
|----------|---|--------|--------|
| | a | b | l |
| WSLT2512 | 0.083 | 0.145 | 0.160 |
| | [1.65] | [3.68] | [4.06] |



| PERFORMANCE | | |
|---------------------------|--|-------------|
| TEST | CONDITIONS OF TEST | TEST LIMITS |
| Thermal Shock | - 55 °C to + 150 °C, 1000 cycles, 15 minutes at each extreme | ± 0.5 % ΔR |
| Short Time Overload | 5 × rated power for 5 seconds | ± 0.5 % ΔR |
| Low Temperature Operation | - 65 °C for 45 minutes | ± 0.5 % ΔR |
| High Temperature Exposure | 1000 hours at + 275 °C | ± 1.0 % ΔR |
| Bias Humidity | + 85 °C, 85 % RH, 10 % Bias, 1000 hours | ± 0.5 % ΔR |
| Mechanical Shock | 100 g's for 6 milliseconds, 5 pulses | ± 0.5 % ΔR |
| Vibration | Frequency varied 10 to 2000 Hz in one minute, 3 directions, 12 hours | ± 0.5 % ΔR |
| Load Life at 70 °C | 1000 hours, 1.5 hrs "ON", 0.5 hours "OFF" | ± 1.0 % ΔR |
| Load Life at 150 °C | 1000 hours, 1.5 hrs "ON", 0.5 hours "OFF" | ± 1.0 % ΔR |
| Resistance to Solder Heat | 260 °C Solder, 10 - 12 second dwell, 25 mm/second emergence | ± 0.5 % ΔR |
| Moisture Resistance | MIL-STD-202, Method 106, 0 % power, 7b not required | ± 1.0 % ΔR |

| PACKING | | | | |
|----------|------------------------|-----------|-------------|------|
| MODEL | REEL | | | |
| | TAPE WIDTH | DIAMETER | PIECES/REEL | CODE |
| WSLT2512 | 12 mm/Embossed Plastic | 178 mm/7" | 2000 | EA |

Embossed Carrier Tape per EIA-481-2



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