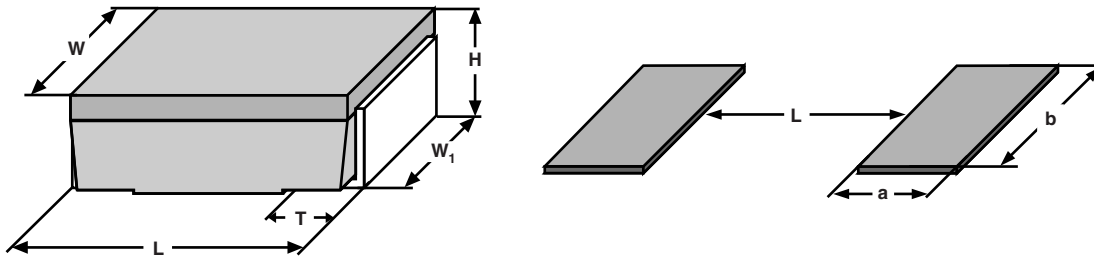


| GLOBAL PART NUMBER INFORMATION   |   |                                      |   |   |   |   |   |  |   |   |   |  |   |   |  |  |
|--|---|--------------------------------------|---|---|---|---|---|--|---|---|---|--|---|---|--|--|
| Global Part Numbering Example: WSC2515R7000FEA (visit <a href="http://www.vishay.net">www.vishay.net</a> Vishay Dale parts numbering manual for all options) |   |                                      |   |   |   |   |   |  |   |   |   |  |   |   |  |  |
| W  | S | C                                    | 2 | 5   | 1 | 5   | R | 7  | 0 | 0 | 0 | F  | E | A |  |  |
| GLOBAL MODEL   |   | SIZE                                 |   | VALUE <sup>(1)</sup>  |   | TOLERANCE   |   | PACKAGING  |   |   |   | SPECIAL  |   |   |  |  |
| WSC<br>WSN   |   | 01/2<br>2515<br>0002<br>4527<br>6927 |   | R = decimal<br>K = thousand<br>R7000 = 0.70 Ω<br>1K500 = 1.5 kΩ |   | D = ± 0.5 %<br>F = ± 1.0 %<br>G = ± 2.0 %<br>H = ± 3.0 %<br>J = ± 5.0 %<br>K = ± 10 % |   | EA = lead (Pb)-free, tape / reel<br>EK = lead (Pb)-free, bulk<br>TA = tin / lead, tape / reel (R86)<br>BA = tin / lead, bulk (B43) |   |   |   | (dash number)<br>(up to 2 digits)<br>from 1 to 99<br>as applicable |   |   |  |  |

**Notes**

<sup>(1)</sup> WSC / WSN marking ([www.vishay.com/doc?30327](http://www.vishay.com/doc?30327))

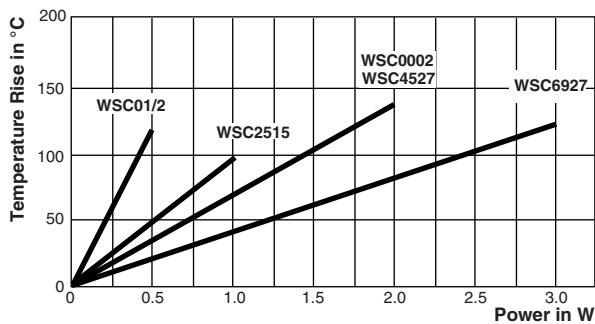
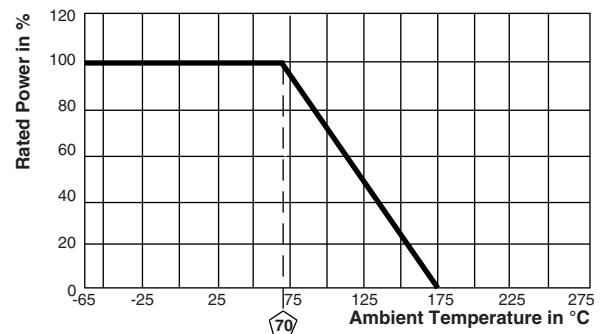
- Packaging code: EB (lead (Pb)-free) and TB (tin / lead) are non-standard packaging codes designating 1000 piece reels. These non-standard packaging codes are identical to our standard EA (lead (Pb)-free) and TA (tin / lead), except that they have a package quantity of 1000 pieces

**DIMENSIONS** in inches (millimeters)


| GLOBAL MODEL | DIMENSIONS                       |                                 |                                 |                                 |                                 | SOLDER PAD DIMENSIONS |              |               |
|--------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------|--------------|---------------|
|              | L                                | H                               | T                               | W                               | W <sub>1</sub>                  | a                     | b            | L             |
| WSC01/2      | 0.200 ± 0.020<br>(5.08 ± 0.508)  | 0.096 ± 0.015<br>(2.44 ± 0.381) | 0.040 ± 0.010<br>(1.02 ± 0.254) | 0.125 ± 0.005<br>(3.18 ± 0.127) | 0.050 ± 0.010<br>(1.27 ± 0.254) | 0.085 (2.16)          | 0.070 (1.78) | 0.080 (2.03)  |
| WSC2515      | 0.250 ± 0.020<br>(6.35 ± 0.508)  | 0.110 ± 0.015<br>(2.79 ± 0.381) | 0.045 ± 0.010<br>(1.14 ± 0.254) | 0.150 ± 0.005<br>(3.81 ± 0.127) | 0.098 ± 0.010<br>(2.49 ± 0.254) | 0.090 (2.29)          | 0.115 (2.92) | 0.120 (3.05)  |
| WSC0002      | 0.455 ± 0.020<br>(11.56 ± 0.508) | 0.167 ± 0.010<br>(4.24 ± 0.254) | 0.100 ± 0.010<br>(2.54 ± 0.254) | 0.275 ± 0.005<br>(6.98 ± 0.127) | 0.215 ± 0.005<br>(5.46 ± 0.127) | 0.155 (3.94)          | 0.230 (5.84) | 0.205 (5.21)  |
| WSC4527      | 0.455 ± 0.020<br>(11.56 ± 0.508) | 0.167 ± 0.010<br>(4.24 ± 0.254) | 0.100 ± 0.010<br>(2.54 ± 0.254) | 0.275 ± 0.005<br>(6.98 ± 0.127) | 0.215 ± 0.005<br>(5.46 ± 0.127) | 0.155 (3.94)          | 0.230 (5.84) | 0.205 (5.21)  |
| WSC6927      | 0.690 ± 0.032<br>(17.53 ± 0.813) | 0.280 ± 0.015<br>(7.11 ± 0.381) | 0.100 ± 0.010<br>(2.54 ± 0.254) | 0.275 ± 0.005<br>(6.98 ± 0.127) | 0.215 ± 0.015<br>(5.46 ± 0.381) | 0.155 (3.94)          | 0.235 (5.97) | 0.470 (11.94) |

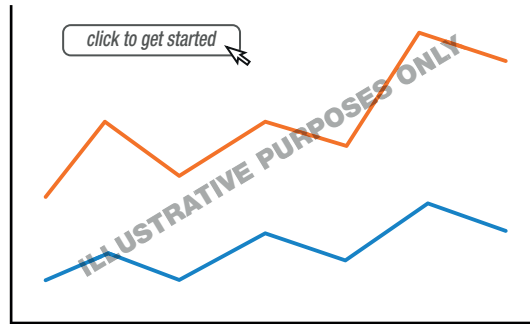
**Notes**

- 3D models available: [www.vishay.com/doc?30328](http://www.vishay.com/doc?30328)
- Surface mount solder profile recommendations: [www.vishay.com/doc?31052](http://www.vishay.com/doc?31052)
- Refer to WSC, WSN conversion guide for detailed construction drawings: [www.vishay.com/doc?49616](http://www.vishay.com/doc?49616)
- For WSC2515 0.5 % tolerance parts, W<sub>1</sub> terminal dimension will be 0.090" ± 0.015"

**TEMPERATURE RISE**

**DERATING**




**PULSE CAPABILITY**



[www.vishay.com/resistors/SMD-wirewound-pulse-capability-calculator/](http://www.vishay.com/resistors/SMD-wirewound-pulse-capability-calculator/)

**Note**

- Pulse capability increases based on the amount of wire for the resistance value and construction. The WSC0002 has greater pulse capability than WSC4527 due to differences in internal construction. The non-inductive WSN has greater pulse capability for the same size WSC because the second layer of wire increases the wire mass available to withstand pulse energy without exceeding temperature limits. Follow pulse graphic link for more information regarding capability

| <b>PERFORMANCE</b>        |  |                    |
|---------------------------|--|--------------------|
| <b>TEST</b>               | <b>CONDITIONS OF TEST</b>                                    | <b>TEST LIMITS</b> |
| Thermal shock             | -55 °C to +150 °C, 1000 cycles, 15 min at each extreme       | ± 0.5 % + 0.05 Ω   |
| Short time overload       | 5 x rated power for 5 s                                      | ± 0.2 % + 0.05 Ω   |
| Low temperature storage   | -65 °C for 24 h  | ± 0.2 % + 0.05 Ω   |
| High temperature exposure | 1000 h at +175 °C  | ± 0.5 % + 0.05 Ω   |
| Bias humidity             | +85 °C, 85 % RH, 10 % bias, 1000 h                           | ± 0.2 % + 0.05 Ω   |
| Mechanical shock          | 100 g's for 6 ms, 5 pulses                                   | ± 0.1 % + 0.05 Ω   |
| Vibration                 | Frequency varied 10 Hz to 500 Hz in 1 min, 3 directions, 9 h | ± 0.1 % + 0.05 Ω   |
| Load life                 | 1000 h at rated power, +70 °C, 1.5 h "ON", 0.5 h "OFF"       | ± 1.0 % + 0.05 Ω   |
| Resistance to solder heat | +260 °C solder, 10 s to 12 s dwell, 25 mm/s emergence        | ± 0.5 % + 0.05 Ω   |

| <b>PACKAGING</b> |                          |                 |                    |             |
|------------------|--------------------------|-----------------|--------------------|-------------|
| <b>MODEL</b>     | <b>REEL</b>              |                 |                    |             |
|                  | <b>TAPE WIDTH</b>        | <b>DIAMETER</b> | <b>PIECES/REEL</b> | <b>CODE</b> |
| WSC01/2          | 12 mm / embossed plastic | 330 mm / 13"    | 2000               | EA / TA     |
| WSC2515          | 16 mm / embossed plastic | 330 mm / 13"    | 2000               | EA / TA     |
| WSC0002, WSC4527 | 24 mm / embossed plastic | 330 mm / 13"    | 1200               | EA / TA     |
| WSC6927          | 32 mm / embossed plastic | 330 mm / 13"    | 725                | EA / TA     |

**Notes**

- Embossed carrier tape per EIA-481
- Additional packaging details at [www.vishay.com/doc?20051](http://www.vishay.com/doc?20051)



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[WSC25155R600FEB](#) [WSC2515220R0FEB](#) [WSC01\22R700FEB](#) [WSC25154R7FEB](#) [WSC01\2R1000FEB](#) [WSC-4527](#)  
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