



## WSL High Power, Power Metal Strip® SMT Resistors

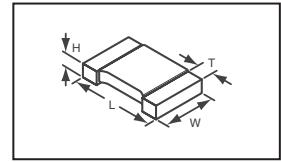


**Features:**  
 • Ideal for all types of current sensing, voltage division and pulse applications including switching and linear power supplies, instruments, and power amplifiers • Specially selected

and stabilized materials allow for high power ratings (2x standard WSL rating) • All welded construction • Very low inductance 0.5nH – 5nH • Excellent frequency response to 50MHz • Low thermal EMF (<3µV/°C) • Operating Temperature Range: -65°C – 170°C

| Series     | Temperature Coefficient ppm/°C         | Short Time Overload          |
|------------|----------------------------------------|------------------------------|
| WSL0603-18 | ±75                                    | 5X Rated Power for 5 Seconds |
| WSL0805-18 | ±75                                    |                              |
| WSL1206-18 | .005Ω – .006Ω/±110<br>.007Ω – .05Ω/±75 |                              |
| WSL2010-18 | .001Ω/±275<br>.006Ω/±110               |                              |
| WSL2512-18 | .007Ω – 0.5Ω/±75<br>.009Ω/±75          |                              |

| Series     | Value Range                   | Dimensions – (mm) |      |      |      |
|------------|-------------------------------|-------------------|------|------|------|
|            |                               | L                 | W    | H    | T    |
| WSL0603-18 | All Listed Values             | 1.52              | 0.76 | .330 | .381 |
| WSL0805-18 | All Listed Values             | 2.03              | 1.27 | .330 | .381 |
| WSL1206-18 | All Listed Values             | 3.20              | 1.60 | .635 | .508 |
| WSL2010-18 | .001Ω – .006Ω<br>.007Ω – .50Ω | 5.08              | 2.54 | .635 | 1.47 |
| WSL2512-18 | .009                          | 6.35              | 3.18 | .635 | .762 |



| Resistance Values WSL0603-18, 1%, WSLL |      |     |     | Resistance Values WSL0805-18, 1%, WSLB |      |     |     | Resistance Values WSL1206-18, 1%, WSLD |     |      |      | Resistance Values WSL2010-18, 1%, WSLF |      |     |     | Resistance Value WSL2512-18, 1%, WSLH |
|----------------------------------------|------|-----|-----|----------------------------------------|------|-----|-----|----------------------------------------|-----|------|------|----------------------------------------|------|-----|-----|---------------------------------------|
| .015                                   | .03  | .05 | .20 | .01                                    | .03  | .05 | .20 | .005                                   | .03 | .001 | .008 | .02                                    | .033 | .08 | .20 | .009                                  |
| .02                                    | .033 | .1  |     | .02                                    | .033 | .10 |     | .006                                   | .04 | .006 | .01  | .025                                   | .04  | .10 | .50 |                                       |
| .025                                   | .04  |     |     | .025                                   | .04  | .15 |     | .009                                   | .05 | .007 | .015 | .03                                    | .05  | .15 |     |                                       |

| Description          | Power Rating (W) | Value Range (Ω) | Digi-Key Part No.‡ | Cut Tape Pricing |       |       | Digi-Key Part No.‡ | Tape and Reel Pricing |       |          |          |          |          |
|----------------------|------------------|-----------------|--------------------|------------------|-------|-------|--------------------|-----------------------|-------|----------|----------|----------|----------|
|                      |                  |                 |                    | 1                | 10    | 50    |                    | 2,000                 | 4,000 | 5,000    | 10,000   | 12,000   |          |
| WSL0603-18, 1%, WSLL | .2               | .015 – .1       | WSLL-(Value)CT-ND  | 1.06             | 8.98  | 39.64 | WSLL-(Value)TR-ND  | —                     | —     | 333.14/M | 312.32/M | —        | —        |
| WSL0805-18, 1%, WSLB | .25              | .01 – .05       | WSLB-(Value)CT-ND  | 1.06             | 8.98  | 39.64 | WSLB-(Value)TR-ND  | —                     | —     | 333.14/M | 312.32/M | —        | —        |
| WSL0805-18, 1%, WSLB | .25              | .10 – .20       | WSLB-(Value)CT-ND  | .86              | 7.29  | 32.14 | WSLB-(Value)TR-ND  | —                     | —     | 269.07/M | 252.26/M | —        | —        |
| WSL1206-18, 1%, WSLD | .5               | .005 – .009     | WSLD-(Value)CT-ND  | 1.54             | 13.07 | 57.66 | WSLD-(Value)TR-ND  | —                     | —     | 486.89/M | —        | —        | 426.03/M |
| WSL1206-18, 1%, WSLD | .5               | .03 – .05       | WSLD-(Value)CT-ND  | 1.16             | 9.83  | 43.40 | WSLD-(Value)TR-ND  | —                     | —     | 365.17/M | —        | —        | 319.52/M |
| WSL2010-18, 1%, WSLF | 1.0              | .001            | WSLF-(Value)CT-ND  | 1.99             | 16.95 | 74.78 | WSLF-(Value)TR-ND  | —                     | —     | 632.64/M | —        | —        | 554.16/M |
| WSL2010-18, 1%, WSLF | 1.0              | .006 – .008     | WSLF-(Value)CT-ND  | 1.90             | 16.14 | 71.18 | WSLF-(Value)TR-ND  | —                     | —     | 602.21/M | —        | —        | 526.93/M |
| WSL2010-18, 1%, WSLF | 1.0              | .01 – .05       | WSLF-(Value)CT-ND  | 1.32             | 11.20 | 49.40 | WSLF-(Value)TR-ND  | —                     | —     | 416.42/M | —        | —        | 364.37/M |
| WSL2010-18, 1%, WSLF | 1.0              | .08 – .50       | WSLF-(Value)CT-ND  | 1.12             | 9.50  | 41.89 | WSLF-(Value)TR-ND  | —                     | —     | 352.36/M | —        | —        | 308.31/M |
| WSL2512-18, 1%, WSLH | 2.0              | .009            | WSLH-(Value)CT-ND  | 1.94             | 16.47 | 72.67 | WSLH-(Value)TR-ND  | 615.02/M              | —     | —        | —        | 538.14/M | —        |

‡ For complete part number, substitute value from Resistance Value Chart for (Value).

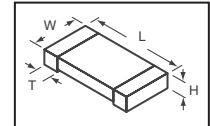
## WSLP Very High Power, Power Metal Strip® SMT Resistors



**Features:** • Very high power to footprint size ratio • Ideal for all types of current sensing and pulse applications including switching and linear power supplies, instruments, power amplifiers and shunts • All welded construction • Solid metal nickel-chrome or Manganese-copper alloy resistive element

with low TCR (<20ppm/°C) • Very low inductance 0.5nH – 5nH • Excellent frequency response to 50MHz • Low thermal EMF (<3µV/°C) • Operating Temperature range: -65°C – 170°C • Temperature Coefficient: ±75ppm/°C • Short Time Overload: 5X Rated Power for 5 Seconds

| Resistance Values |      |     |
|-------------------|------|-----|
| .005              | .015 | .03 |
| .01               | .02  | .05 |



| Description        | Power Rating (W) | Value Range (Ω) | Dimensions – mm |     |      | Digi-Key Part No.‡ | Cut Tape Pricing  |      |       | Digi-Key Part No.‡ | Tape and Reel Pricing |          |
|--------------------|------------------|-----------------|-----------------|-----|------|--------------------|-------------------|------|-------|--------------------|-----------------------|----------|
|                    |                  |                 | L               | W   | T    |                    | H                 | 1    | 10    |                    | 50                    | 4,000    |
| WSLP1206, 1%, WSLP | 1                | .005            | 3.2             | 1.6 | .635 | .508               | WSLP-(Value)CT-ND | 1.50 | 12.73 | 56.16              | WSLP-(Value)TR-ND     | 474.08/M |
| WSLP1206, 1%, WSLP | 1                | .01 – .05       | 3.2             | 1.6 | .635 | .508               | WSLP-(Value)CT-ND | 1.02 | 8.65  | 38.14              | WSLP-(Value)TR-ND     | 320.32/M |

‡ For complete part number, substitute value from Resistance Value Chart for (Value).

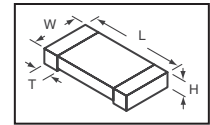
## WSLT High Temperature, Power Metal Strip® SMT Resistors



**Features:** • Ideal for all types of current sensing, voltage division and pulse applications including switching and linear power supplies, instruments and power amplifiers • 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 (<5nH) • Excellent frequency response to 50MHz • Low thermal EMF (<3µV/°C) • Operating Temperature Range: -65°C – 275°C • Inductance: <5nH • Temperature Coefficient: ±75ppm/°C

| Resistance Values |     |    |    |
|-------------------|-----|----|----|
| .01               | .02 | .1 | .5 |
| .015              | .05 | .2 |    |



| Description        | Power Rating (W) | Value Range (Ω) | Dimensions – mm |      |      | Digi-Key Part No.‡ | Cut Tape Pricing  |      |      | Digi-Key Part No.‡ | Tape and Reel Pricing |          |
|--------------------|------------------|-----------------|-----------------|------|------|--------------------|-------------------|------|------|--------------------|-----------------------|----------|
|                    |                  |                 | L               | W    | T    |                    | H                 | 1    | 10   |                    | 50                    | 2,000    |
| WSLT2512, 1%, WSLT | 1                | .01 – .05       | 6.35            | 3.18 | .635 | .762               | WSLT-(Value)CT-ND | 1.14 | 9.67 | 42.64              | WSLT-(Value)TR-ND     | 358.76/M |
| WSLT2512, 1%, WSLT | 1                | .1 – .5         | 6.35            | 3.18 | .635 | .762               | WSLT-(Value)CT-ND | 1.00 | 8.47 | 37.39              | WSLT-(Value)TR-ND     | 313.92/M |

‡ For complete part number, substitute value from Resistance Value Chart for (Value).

## WSC Wirewound SMT Resistors



| Resistance Values WSC01/2, 1% WSCA |     |      |      | Resistance Values WSC4527, 1%, WSCC |     |      |      |
|------------------------------------|-----|------|------|-------------------------------------|-----|------|------|
| 1.0                                | 2.0 | 4.99 |      | 1.0                                 | 2.0 | 4.99 |      |
|                                    |     |      | 2.0K | 1.0                                 | 2.0 | 4.99 | 2.0K |
|                                    |     |      |      | 5.0                                 | 10  | 100  | 1.0K |
|                                    |     |      |      | 5.0                                 | 20  | 400  |      |
|                                    |     |      |      | 5.0                                 | 50  | 1.0K |      |

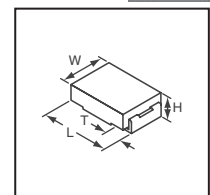
  

| Resistance Values WSC2515, 1%, WSCB |     |      | Resistance Values WSC6927, 1%, WSCD |     |      |
|-------------------------------------|-----|------|-------------------------------------|-----|------|
| .50                                 | 1.0 | 2.0  | .50                                 | 1.0 | 2.0  |
|                                     |     | 1.0K |                                     |     | 1.0K |
|                                     |     |      |                                     |     |      |
|                                     |     |      |                                     |     |      |
|                                     |     |      |                                     |     |      |

| Series  | Operating Temperature Range | Temperature Coefficient ppm/°C          | Short Time Overload          |
|---------|-----------------------------|-----------------------------------------|------------------------------|
| WSC01/2 | -65°C – 175°C               | ±50<br>.50Ω/±90<br>50Ω – 2.0KΩ/±20      | 5X Rated Power for 5 Seconds |
| WSC2515 | -65°C – 275°C               | 1.0Ω – 10Ω/±50<br>10Ω – 2.0KΩ/±20       |                              |
| WSC4527 | -65°C – 275°C               | 1.0Ω – 5.0Ω/±50<br>10Ω – 2.0KΩ/±20      |                              |
| WSC6927 | -65°C – 275°C               | .50Ω/±90<br>1.0Ω/±50<br>10Ω – 1.0KΩ/±20 |                              |

**Features:** • All welded construction • Molded encapsulation • Wraparound terminations • Excellent stability at different environmental conditions • Superior surge capability

| Series  | Dimensions – (mm) |      |      |      |
|---------|-------------------|------|------|------|
|         | L                 | W    | H    | T    |
| WSC01/2 | 5.08              | 2.44 | 1.02 | 3.18 |
| WSC2515 | 6.35              | 2.79 | 1.14 | 3.81 |
| WSC4527 | 11.56             | 4.24 | 2.54 | 6.98 |
| WSC6927 | 17.53             | 7.11 | 2.54 | 6.98 |



| Description       | Power Rating (W) | Value Range (Ω) | Digi-Key Part No.‡ | Cut Tape Pricing |       |        | Digi-Key Part No.‡ | Tape and Reel Pricing |           |
|-------------------|------------------|-----------------|--------------------|------------------|-------|--------|--------------------|-----------------------|-----------|
|                   |                  |                 |                    | 1                | 10    | 50     |                    | Qty.                  | Pricing   |
| WSC01/2, 1%, WSCA | .5               | 1.0 – 4.99      | WSCA-(Value)CT-ND  | 1.94             | 16.47 | 72.67  | WSCA-(Value)TR-ND  | 2,000                 | 615.02/M  |
| WSC2515, 1%, WSCB | 1.0              | .50             | WSCB-(Value)CT-ND  | 2.06             | 17.50 | 77.18  | WSCB-(Value)TR-ND  | 2,000                 | 653.46/M  |
| WSC2515, 1%, WSCB | 1.0              | 1.0 – 10        | WSCB-(Value)CT-ND  | 1.54             | 13.07 | 57.66  | WSCB-(Value)TR-ND  | 2,000                 | 486.89/M  |
| WSC2515, 1%, WSCB | 1.0              | 50 – 100        | WSCB-(Value)CT-ND  | 1.98             | 16.82 | 74.18  | WSCB-(Value)TR-ND  | 2,000                 | 627.83/M  |
| WSC2515, 1%, WSCB | 1.0              | 1.0K – 2.0K     | WSCB-(Value)CT-ND  | 2.58             | 21.92 | 96.70  | WSCB-(Value)TR-ND  | 2,000                 | 820.02/M  |
| WSC4527, 1%, WSCC | 2.0              | 1.0             | WSCC-(Value)CT-ND  | 2.06             | 17.50 | 77.18  | WSCC-(Value)TR-ND  | 1,200                 | 816.82/M  |
| WSC4527, 1%, WSCC | 2.0              | 2.0 – 20        | WSCC-(Value)CT-ND  | 1.54             | 13.07 | 57.66  | WSCC-(Value)TR-ND  | 1,200                 | 608.61/M  |
| WSC4527, 1%, WSCC | 2.0              | 50 – 400        | WSCC-(Value)CT-ND  | 2.26             | 19.20 | 84.68  | WSCC-(Value)TR-ND  | 1,200                 | 896.90/M  |
| WSC4527, 1%, WSCC | 2.0              | 1.0K – 2.0K     | WSCC-(Value)CT-ND  | 3.06             | 26.00 | 114.71 | WSCC-(Value)TR-ND  | 1,200                 | 1217.22/M |
| WSC6927, 1%, WSCD | 3.0              | .50 – 1.0       | WSCD-(Value)CT-ND  | 3.38             | 28.72 | 126.73 | WSCD-(Value)TR-ND  | 725                   | 1219.22   |
| WSC6927, 1%, WSCD | 3.0              | 1.0 – 1.0K      | WSCD-(Value)CT-ND  | 2.98             | 25.32 | 111.71 | WSCD-(Value)TR-ND  | 725                   | 1074.07   |

‡ For complete part number, substitute value from Resistance Value Chart for (Value).

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

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