

# TSC & TVC Series

Tubular Power Wirewound Resistors



- Resistances from 1 to 48kOhms
- Power Rating 5 to 225Watts
- Resistance Tolerances to  $\pm 5\%$



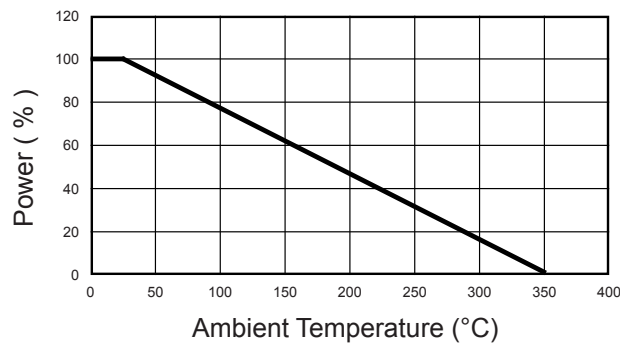
#### Options:

- Special Tolerances
- Ayrton-Perry / Non-Inductive Windings
- Fixed / Tapped / or Adjustable
- Quick Connect Terminals
- Mounting Brackets

## SPECIFICATIONS

| Specification           | Value  |
|-------------------------|--|
| Resistance Range        | 1 $\Omega$ to 48kOhms                                    |
| Tolerances              | $\pm 5\%$ Standard ( Call Factory for Other Tolerances ) |
| Temperature Coefficient | >20R : $\pm 200$ ppm/K<br>1R to 20R : $\pm 260$ ppm/K    |
| Temperature Range       | -55°C to +350°C  |
| Dielectric Strength     | 1000 VAC   |
| Overload                | 10X Rated Power / 5s                                     |

Power Derating Curve



## Ordering Information

For Non-Inductive Windings / insert the letter "N" ( i.e. TSCN-50 )

TSC-50 and larger parts are Available with 0.250 x 0.032 Quick Connect Terminal / Add "QC" to the Part Number.

Push-in friction grip mounting brackets are Available / Add "BKTS" to Part Number

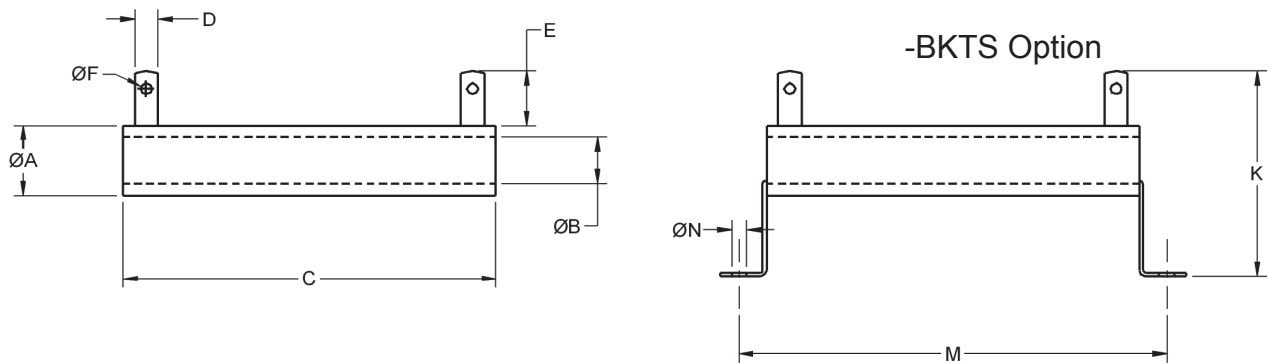
Part Number - Resistance - Tolerance - TCR ( If not standard ) - Quick-Connects - Brackets

Example: TSC-75 100 Ohm 5% QC BKTS

## SPECIFICATIONS (continued)

| Type    | Wattage Rating | Resistance Range <sup>1</sup> | Dimensions               |                          |                          | Terminal Size | BKTS - Mounting Dimensions |                          |                          |
|---------|----------------|-------------------------------|--------------------------|--------------------------|--------------------------|---------------|----------------------------|--------------------------|--------------------------|
|         |                |                               | A<br>±0.062"<br>[±1.6mm] | B<br>±0.031"<br>[±0.8mm] | C<br>±0.062"<br>[±1.6mm] |               | K<br>±0.062"<br>[±1.6mm]   | M<br>±0.062"<br>[±1.6mm] | C<br>±0.020"<br>[±0.5mm] |
| TSC-5   | 5              | 1 - 1k                        | 0.312 [7.9]              | 0.188 [4.8]              | 1.00 [25.4]              | T1            | -                          | 1.44 [36.6]              | 0.146 [3.7]              |
| TSC-10  | 10             | 1 - 1k                        | 0.312 [7.9]              | 0.188 [4.8]              | 1.75 [44.4]              | T1            | 0.938 [23.8]               | 2.19 [55.6]              | 0.146 [3.7]              |
| TSC-20  | 20             | 1 - 10k                       | 0.250 [6.4]              | 0.188 [4.8]              | 2.00 [50.8]              | T1            | -                          | 2.50 [63.5]              | 0.146 [3.7]              |
| TSC-25  | 25             | 1 - 10k                       | 0.563 [14.3]             | 0.312 [7.9]              | 2.00 [50.8]              | T2            | 1.688 [42.9]               | 2.75 [69.9]              | 0.161 [4.1]              |
| TSC-25A | 30             | 1 - 10k                       | 0.750 [19.1]             | 0.500 [12.7]             | 2.00 [50.8]              | T2            | 2.312 [58.7]               | 2.88 [73.2]              | 0.161 [4.1]              |
| TSC-25B | 30             | 1 - 10k                       | 0.625 [15.9]             | 0.453 [11.5]             | 2.00 [50.8]              | T2            | 1.688 [42.9]               | 2.63 [66.8]              | 0.161 [4.1]              |
| TSC-50  | 50             | 1.5 - 15k                     | 0.563 [14.3]             | 0.312 [7.9]              | 4.00 [102]               | T2            | 1.688 [42.9]               | 4.75 [121]               | 0.161 [4.1]              |
| TSC-50A | 60             | 1.5 - 15k                     | 0.750 [19.1]             | 0.500 [12.7]             | 4.00 [102]               | T2            | 2.312 [58.7]               | 4.88 [124]               | 0.196 [5.0]              |
| TSC-50B | 70             | 1.5 - 15k                     | 0.750 [19.1]             | 0.547 [13.9]             | 4.50 [114]               | T2            | 2.312 [58.7]               | 5.38 [137]               | 0.196 [5.0]              |
| TSC-75  | 75             | 1.5 - 15k                     | 0.563 [14.3]             | 0.312 [7.9]              | 6.00 [152]               | T2            | 1.688 [42.9]               | 6.75 [171]               | 0.161 [4.1]              |
| TSC-75A | 90             | 2.7 - 20k                     | 0.750 [19.1]             | 0.500 [12.7]             | 6.00 [152]               | T2            | 2.312 [58.7]               | 6.88 [175]               | 0.196 [5.0]              |
| TSC-100 | 100            | 2.7 - 20k                     | 0.750 [19.1]             | 0.500 [12.7]             | 6.50 [165]               | T2            | 2.312 [58.7]               | 7.38 [187]               | 0.196 [5.0]              |
| TSC-130 | 130            | 2.7 - 20k                     | 1.125 [28.6]             | 0.750 [19.1]             | 6.50 [165]               | T3            | 2.812 [71.4]               | 7.38 [187]               | 0.196 [5.0]              |
| TSC-160 | 175            | 3.3 - 39k                     | 1.125 [28.6]             | 0.750 [19.1]             | 8.50 [216]               | T3            | 2.812 [71.4]               | 9.38 [238]               | 0.196 [5.0]              |
| TSC-200 | 225            | 3.3 - 47k                     | 1.125 [28.6]             | 0.750 [19.1]             | 10.50 [267]              | T3            | 2.812 [71.4]               | 11.38 [289]              | 0.196 [5.0]              |

<sup>1</sup> For non-inductive windings / divide maximum resistance by 2



| Terminal Size | D ±0.010" [±6.4mm] | E ±0.032" [±0.8mm] | F ±0.005" [±0.13mm] |
|---------------|--------------------|--------------------|---------------------|
| T1            | 0.188 [ 4.8 ]      | 0.438 [ 11.1 ]     | 0.104 [ 2.6 ]       |
| T2            | 0.250 [ 6.3 ]      | 0.563 [ 14.3 ]     | 0.166 [ 4.2 ]       |
| T3            | 0.312 [ 7.9 ]      | 0.625 [ 15.9 ]     | 0.196 [ 5.0 ]       |