

**FEATURES**

- Resistances from 0.02 to 260kOhms
- Power Rating 1 to 15 Watts
- Resistance Tolerances to  $\pm 0.01\%$
- Low TCR:  $\pm 20\text{ppm/K}$  Standard
- MIL-R-26 / MIL-R-39007 Power Ratings
- Temperature Range:  $-55^{\circ}\text{C}$  to  $+250^{\circ}\text{C}$
- Non-Inductive Windings Available



**RoHS\***  
COMPLIANT

**TABLE 1 – SPECIFICATIONS**

|                                            |                                                                                                                                                             |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tolerances                                 | $\pm 0.01\%$ to $\pm 10\%$ ( 1% Standard )                                                                                                                  |
| Temperature Coefficient                    | >10 $\Omega$ : $\pm 20\text{ppm/K}$<br>1 $\Omega$ to 10 $\Omega$ : $\pm 50\text{ppm/K}$<br><1 $\Omega$ : Call Factory                                       |
| Temperature Range                          | $-55^{\circ}\text{C}$ to $+250^{\circ}\text{C}$                                                                                                             |
| Dielectric Strength                        | 500 VAC : UB-1 / UB-2 / UB-3<br>1000 VAC : All Others                                                                                                       |
| Constuction                                | Centerless ground ceramic core<br>Tinned copper or copperweld leads<br>High temperature / trivalent / inorganic Silicone coating<br>All welded terminations |
| Environmental Performance<br>(MIL-STD 202) | $\Delta R$                                                                                                                                                  |
| Dielectric                                 | $\pm 0.2\% + 0.05\Omega$                                                                                                                                    |
| Load Life                                  | to $\pm 1\%$ depending on size and Resistance Value                                                                                                         |
| Storage                                    | $\pm 0.2\% + 0.05\Omega$                                                                                                                                    |
| Moisture Resistance                        | $\pm 0.2\% + 0.05\Omega$                                                                                                                                    |
| Thermal Shock                              | $\pm 0.2\% + 0.05\Omega$                                                                                                                                    |
| 5X Overload ( 5s )                         | $\pm 0.2\% + 0.05\Omega$                                                                                                                                    |
| Shock                                      | $\pm 0.1\% + 0.05\Omega$                                                                                                                                    |
| Vibration                                  | $\pm 0.1\% + 0.05\Omega$                                                                                                                                    |

**ORDERING INFORMATION**

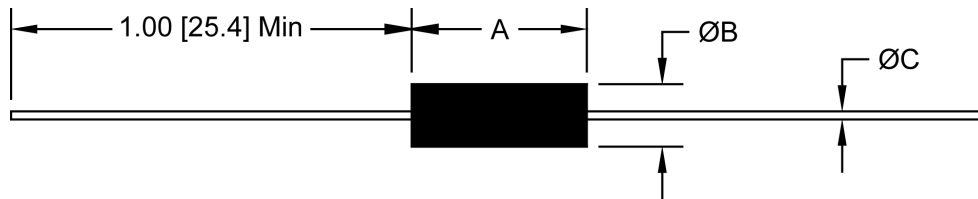
**Part Number - Resistance - Tolerance - TCR ( If not standard )**

UB-3 10 Ohm 1%  
For Non-Inductive Windings / insert the letter "N" ( i.e. UBN-5 )

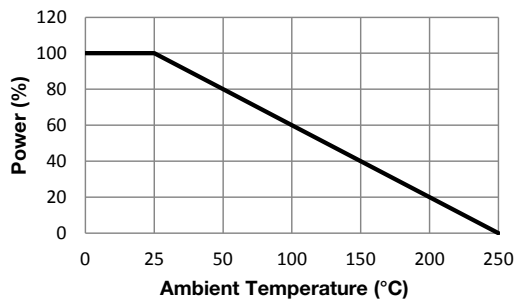
**TABLE 1 – SPECIFICATIONS (continued)**

| Type              | Wattage Rating ( Watts ) | Maximum Ohms <sup>2</sup> | Dimensions               |                          |                                        | Maximum Working Voltage | MIL-R-26 / MIL-R-39007 Style |
|-------------------|--------------------------|---------------------------|--------------------------|--------------------------|----------------------------------------|-------------------------|------------------------------|
|                   |                          |                           | A<br>±0.062"<br>[±1.6mm] | B<br>±0.031"<br>[±0.8mm] | C <sup>1</sup><br>±0.002"<br>[±0.05mm] |                         |                              |
| UB-1              | 1                        | 3.4k                      | 0.250 [6.4]              | 0.085 [2.2]              | 0.020 [0.5]<br>0.025 [0.6]             | 33                      | RW-81<br>RWR-81              |
| UB-2 <sup>3</sup> | 1.5                      | 7.5k                      | 0.312 [7.9]              | 0.078 [2.0]              | 0.020 [0.5]<br>0.025 [0.6]             | 42                      | RWR-82                       |
| UB-3              | 2                        | 10k                       | 0.406 [10.3]             | 0.094 [2.4]              | 0.025 [0.6]<br>0.020 [0.5]             | 80                      | RW-80<br>RWR-80              |
| UB-3C             | 3                        | 12.5k                     | 0.350 [8.9]              | 0.156 [4.0]              | 0.032 [0.8]                            | 135                     |                              |
| UB-5              | 4                        | 25k                       | 0.560 [14.2]             | 0.187 [4.7]              | 0.032 [0.8]                            | 162                     |                              |
| UB-5C             | 5                        | 32k                       | 0.500 [12.7]             | 0.218 [5.5]              | 0.032 [0.8]                            | 194                     |                              |
| UB-6              | 6                        | 50k                       | 0.625 [15.9]             | 0.250 [6.4]              | 0.040 [1.0]                            | 258                     |                              |
| UB-10             | 7                        | 95k                       | 0.875 [22.2]             | 0.312 [7.9]              | 0.040 [1.0]                            | 425                     | RW-84                        |
| UB-12             | 10                       | 150k                      | 1.220 [31.0]             | 0.312 [7.9]              | 0.040 [1.0]                            | 607                     |                              |
| UB-15             | 15                       | 260k                      | 1.780 [45.2]             | 0.375 [9.5]              | 0.040 [1.0]                            | 1050                    |                              |

<sup>1</sup> Lead Diameter: 18 AWG = 0.040" / 20 AWG = 0.032" / 22 AWG = 0.025" / 24 AWG = 0.020"  
 Where more than one lead is listed / the top value is Standard  
<sup>2</sup> For non-inductive windings / divide maximum resistance by 2  
<sup>3</sup> This part does not meet the RoHS directive - call factory for details



**FIGURE 1 – DERATING**





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