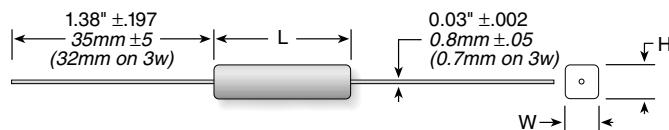


# TUM/TUW Series

## Ceramic Housed Axial Terminal Power



| Series | Wattage | Ohms      | Dimensions (in. / mm) |                  |                 | Voltage | Element     |
|--------|---------|-----------|-----------------------|------------------|-----------------|---------|-------------|
|        |         |           | Length<br>(±1mm)      | Height<br>(±1mm) | Width<br>(±1mm) |         |             |
| TUW3   | 3       | 0.01-39   | 0.87 / 22             | 0.31 / 8         | 0.31 / 8        | 350     | Wirewound   |
| TUW5   | 5       | 0.01-47   | 0.87 / 22             | 0.35 / 9         | 0.39 / 10       | 350     | Wirewound   |
| TUW7   | 7       | 0.10-680  | 1.48 / 35             | 0.35 / 9         | 0.39 / 10       | 500     | Wirewound   |
| TUW10  | 10      | 0.10-990  | 1.93 / 49             | 0.35 / 9         | 0.39 / 10       | 750     | Wirewound   |
| TUW15  | 15      | 0.10-1000 | 1.93 / 49             | .453/11.5        | 0.49 / 12.5     | 1000    | Wirewound   |
| TUM3   | 3       | 180-33K   | 0.87 / 22             | 0.31 / 8         | 0.31 / 8        | 350     | Metal oxide |
| TUM5   | 5       | 220-50K   | 0.87 / 22             | 0.35 / 9         | 0.39 / 10       | 350     | Metal oxide |
| TUM7   | 7       | 910-50K   | 1.48 / 35             | 0.35 / 9         | 0.39 / 10       | 500     | Metal oxide |
| TUM10  | 10      | 1000-50K  | 1.93 / 49             | 0.35 / 9         | 0.39 / 10       | 750     | Metal oxide |
| TUM15  | 15      | 1100-150K | 1.93 / 49             | .453/11.5        | 0.49 / 12.5     | 1000    | Metal oxide |

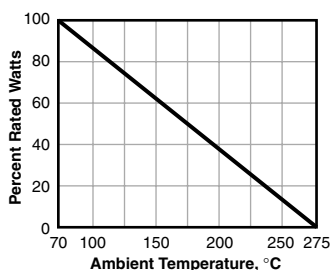
The TUM/TUW Series resistors are our most economical power resistors. They are recommended for commercial applications where low cost is critical.

They are available in small standard packs for standard values, or bulk packaged for even lower costs.

## FEATURES

- Economical Commercial Grade for general purpose use
- Wirewound and Metal Oxide construction
- Wide resistance range
- Flameproof inorganic construction

## DERATING CURVE



## SPECIFICATIONS

### Material

**Housing:** Ceramic

**Core:** Fiberglass or metal oxide

**Filling:** Cement based

### Electrical

**Tolerance:** 5% standard

**Temperature coeff.:**

0.01-20Ω ±400ppm/°C

20-150KΩ ±350ppm/°C

**Dielectric withstanding voltage:**  
1,000VAC

### Short time overload

TUW: 10x rated power for 5 sec.

TUM: 5x rated power for 5 sec.

## ORDERING INFORMATION

|                      |         |                  |
|----------------------|---------|------------------|
| TUM3J8R2E            |         |                  |
| Series               | Wattage | Resistance Value |
| TUM = Ceramic Housed | 3       | Example:         |
| Metal Oxide          | 5       | R50=0.50Ω        |
| TUW = Ceramic Housed | 7       | 1R0=1Ω           |
| Wirewound            | 10      | 8R2=8.2Ω         |
|                      | 15      | 250=250Ω         |
|                      |         | 1K0=1,000Ω       |
|                      |         | 8K2=8,200Ω       |
|                      |         | 10K=10,000Ω      |

## STANDARD PART NUMBERS FOR TUW/TUM SERIES

| Ohmic value | Part No.<br>Prefix<br>Suffix | Wattage |       |       |        |        | Ohmic value | Part No.<br>Prefix<br>Suffix | Wattage |       |       |        |        | Ohmic value | Part No.<br>Prefix<br>Suffix | Wattage |       |       |        |        | Ohmic value | Part No.<br>Prefix<br>Suffix | Wattage |       |       |        |        |
|-------------|------------------------------|---------|-------|-------|--------|--------|-------------|------------------------------|---------|-------|-------|--------|--------|-------------|------------------------------|---------|-------|-------|--------|--------|-------------|------------------------------|---------|-------|-------|--------|--------|
|             |                              | TUW3J   | TUW5J | TUW7J | TUW10J | TUW15J |             |                              | TUW3J   | TUW5J | TUW7J | TUW10J | TUW15J |             |                              | TUW3J   | TUW5J | TUW7J | TUW10J | TUW15J |             |                              | TUW3J   | TUW5J | TUW7J | TUW10J | TUW15J |
| 0.01        | R01E                         | ✓       | ✓     |       |        |        | 1.0         | 1R0E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 33          | 33RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 680         | 680E                         | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.01        | R01E                         | ✓       | ✓     |       |        |        | 1.5         | 1R5E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 39          | 39RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 750         | 750E                         | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.02        | R02E                         | ✓       | ✓     |       |        |        | 2.0         | 2R0E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 43          | 43RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 820         | 820E                         | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.04        | R04E                         | ✓       | ✓     |       |        |        | 2.7         | 2R7E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 47          | 47RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 1000        | 1K0                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.05        | R05E                         | ✓       | ✓     |       |        |        | 3.0         | 3R0E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 56          | 56RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 1500        | 1K5                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.10        | R10E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 3.3         | 3R3E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 68          | 68RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 2000        | 2K0                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.15        | R15E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 3.9         | 3R9E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 75          | 75RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 2700        | 2K7                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.20        | R20E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 4.3         | 4R3E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 82          | 82RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 3000        | 3K0                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.27        | R27E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 4.7         | 4R7E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 100         | 100E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 3300        | 3K3                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.30        | R30E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 5.6         | 5R6E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 150         | 150E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 3900        | 3K9                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.33        | R33E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 6.8         | 6R8E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 200         | 200E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 4300        | 4K3                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.39        | R39E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 7.5         | 7R5E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 270         | 270E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 4700        | 4K7                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.43        | R43E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 8.2         | 8R2E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 300         | 300E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 5600        | 5K6                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.47        | R47E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 10          | 10RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 330         | 330E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 6800        | 6K8                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.56        | R56E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 15          | 15RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 390         | 390E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 7500        | 7K5                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.68        | R68E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 20          | 20RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 430         | 430E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 8200        | 8K2                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.75        | R75E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 27          | 27RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 470         | 470E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 10000       | 10K                          | ✓       | ✓     | ✓     | ✓      | ✓      |
| 0.82        | R82E                         | ✓       | ✓     | ✓     | ✓      | ✓      | 30          | 30RE                         | ✓       | ✓     | ✓     | ✓      | ✓      | 560         | 560E                         | ✓       | ✓     | ✓     | ✓      | ✓      |             |                              |         |       |       |        |        |

Check product availability at [www.ohmite.com](http://www.ohmite.com)

Shaded area: change prefix to TUM