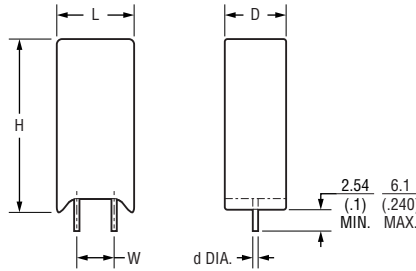


## Features

- Formerly a Riedon™ product
- Resistances from 0.01 to 91k  $\Omega$
- Resistance tolerances as low as  $\pm 0.01\%$
- Power rating: 2 to 10 watts
- Flameproof inorganic construction
- Low TCR
- All welded resistance element
- Non-inductive windings available
- RoHS compliant\*

## UV Series – Riedon™ Ceramic Wirewound Resistors by Bourns

### Specifications and Dimensions



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

Bourns Part Number	Power Rating @ 70 °C (W)	Resistance Range <sup>1</sup> ( $\Omega$ )	Dimensions				
			H	L	D	W	d <sup>2</sup>
UV2	2	0.01 to 12k	$\frac{20.3 \pm 1.5}{(.80 \pm .006)}$	$\frac{11.0 \pm 1.0}{(.435 \pm .04)}$	$\frac{7.0 \pm 1.0}{(.275 \pm .04)}$	$\frac{5.1 \pm 0.4}{(.200 \pm .015)}$	$\frac{0.8 \pm 0.05}{(.032 \pm .002)}$
UV3	3	0.01 to 22k	$\frac{25.4 \pm 1.5}{(1.00 \pm .006)}$	$\frac{12.1 \pm 1.0}{(.475 \pm .04)}$	$\frac{8.1 \pm 1.0}{(.320 \pm .04)}$	$\frac{5.1 \pm 0.4}{(.200 \pm .015)}$	$\frac{0.8 \pm 0.05}{(.032 \pm .002)}$
UV5	5	0.01 to 45k	$\frac{25.4 \pm 1.5}{(1.00 \pm .006)}$	$\frac{13.2 \pm 1.0}{(.520 \pm .04)}$	$\frac{8.9 \pm 1.0}{(.350 \pm .04)}$	$\frac{5.1 \pm 0.4}{(.200 \pm .015)}$	$\frac{0.8 \pm 0.05}{(.032 \pm .002)}$
UV7	7	0.01 to 65k	$\frac{38.7 \pm 1.5}{(1.52 \pm .006)}$	$\frac{13.2 \pm 1.0}{(.520 \pm .04)}$	$\frac{9.7 \pm 1.0}{(.380 \pm .04)}$	$\frac{5.1 \pm 0.4}{(.200 \pm .015)}$	$\frac{0.8 \pm 0.05}{(.032 \pm .002)}$
UV10	10	0.01 to 91k	$\frac{35.1 \pm 1.5}{(1.38 \pm .006)}$	$\frac{16.1 \pm 1.0}{(.635 \pm .04)}$	$\frac{12.2 \pm 1.0}{(.480 \pm .04)}$	$\frac{7.6 \pm 0.4}{(.300 \pm .015)}$	$\frac{1.0 \pm 0.05}{(.040 \pm .002)}$

Notes:

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

<sup>3</sup> Lead Diameter: 18 AWG = 0.040" / 20 AWG = 0.032".

### Specifications

Specification	Value
Tolerances	$\pm 0.01\%$ to $\pm 10\%$ (1% Standard)
Temperature Coefficient	>10 $\Omega$ : $\pm 20$ PPM/ $^{\circ}\text{C}$ 1 $\Omega$ to 10 $\Omega$ : $\pm 50$ PPM/ $^{\circ}\text{C}$ <1 $\Omega$ : Other TCR values available. <a href="#">Contact Bourns.</a>
Temperature Range	-55 $^{\circ}\text{C}$ to +275 $^{\circ}\text{C}$
Dielectric Strength	1500 VAC
Construction	Centerless ground ceramic core Matte tin over copper High temperature / inorganic potting compound All welded terminations

### Additional Information

Click these links for more information:



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).

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"Riedon Logo" is a registered trademark of BE Services Company, Inc., in the United States.

"Riedon" is a trademark of BE Services Company, Inc.

## Environmental Performance

Test (MIL-STD 202)	ΔR
Dielectric	±0.2 % + 0.05 Ω
Load Life	±1 % + 0.05 Ω
Storage	±0.2 % + 0.05 Ω
Moisture Resistance	±0.2 % + 0.05 Ω
Thermal Shock	±0.2 % + 0.05 Ω
5X Overload (5 s)	±0.2 % + 0.05 Ω
Shock	±0.1 % + 0.05 Ω
Vibration	±0.1 % + 0.05 Ω

## How To Order

**UV 5 - 4R J 1**

Model \_\_\_\_\_  
 UV (standard)  
 UVN (non-inductive)

Power Rating (W) \_\_\_\_\_  
 2 = 2      7 = 7  
 3 = 3      10 = 10  
 5 = 5

Resistance Code \_\_\_\_\_  
 For values ≤10K Ω, "R" represents decimal point  
 (Example: 4R = 4 Ω)  
 For values >10K Ω, "K" represents decimal point  
 (Example 1K5 = 1.5K Ω)

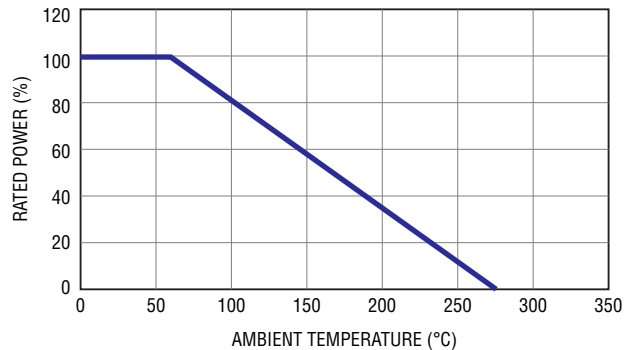
Tolerance \_\_\_\_\_  
 X\*\* = ±0.01 %      D = ±0.5 %  
 W\*\* = ±0.02 %      F = ±1 %  
 V\*\* = ±0.025 %      G = ±2 %  
 U\*\* = ±0.05 %      H = ±3 %  
 B = ±0.1 %      J = ±5 %  
 T = ±0.2 %      K = ±10 %  
 C = ±0.25 %

Internal Use \_\_\_\_\_

(Specific TCR values available upon request.)

\*\*[Contact Bourns](#) for tolerances <±0.01 %.

## Power Derating Curve



## Packaging Specifications

### Tray Packaging

UV2 .....	182 pcs./tray
UV3 .....	110 pcs./tray
UV5 .....	110 pcs./tray
UV7 .....	70 pcs./tray
UV10 .....	64 pcs./tray

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