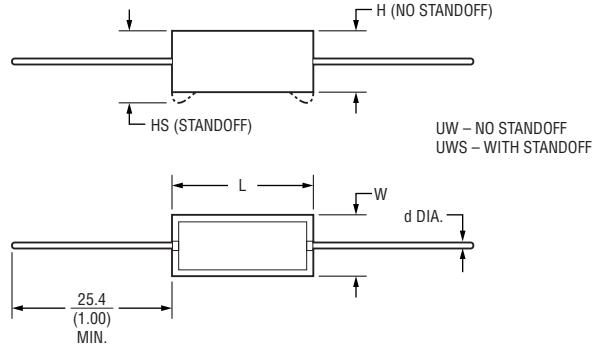


Features

- Formerly a Riedon™ product
- Resistances from 0.01 to 91k Ω
- Resistance tolerances as low as $\pm 0.01\%$
- Power rating: 2 to 15 watts
- Suitable for current sensing
- TCR as low as ± 20 PPM/ $^{\circ}\text{C}$
- All welded resistance element
- Non-inductive windings available
- Flameproof inorganic construction
- UWS version with built-in standoff
- RoHS compliant*

UW Series – Riedon™ Ceramic Wirewound Resistors by Bourns

Specifications and Dimensions



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

Bourns Part Number	Power Rating @ 70 $^{\circ}\text{C}$ (W)	Resistance Range ¹ (Ω)	Dimensions				
			L	H	HS	W	d ²
UW2	2	0.01 to 12k	$\frac{17.8 \pm 1.0}{(.700 \pm .04)}$	$\frac{6.2 \pm 1.0}{(.245 \pm .04)}$	$\frac{7.6 \pm 1.0}{(.300 \pm .04)}$	$\frac{6.5 \pm 0.4}{(.255 \pm .015)}$	$\frac{0.8 \pm 0.4}{(.032 \pm .015)}$
UW3	3	0.01 to 22k	$\frac{22.2 \pm 1.0}{(.875 \pm .04)}$	$\frac{7.9 \pm 1.0}{(.312 \pm .04)}$	$\frac{9.5 \pm 1.0}{(.375 \pm .04)}$	$\frac{7.9 \pm 0.4}{(.312 \pm .015)}$	$\frac{0.8 \pm 0.4}{(.032 \pm .015)}$
UW5	5	0.01 to 45k	$\frac{22.2 \pm 1.0}{(.875 \pm .04)}$	$\frac{9.5 \pm 1.0}{(.375 \pm .04)}$	$\frac{11.1 \pm 1.0}{(.437 \pm .04)}$	$\frac{9.5 \pm 0.4}{(.375 \pm .015)}$	$\frac{0.8 \pm 0.4}{(.032 \pm .015)}$
UW10	10	0.01 to 65k	$\frac{48 \pm 1.0}{(1.875 \pm .04)}$	$\frac{9.5 \pm 1.0}{(.375 \pm .04)}$	$\frac{12.7 \pm 1.0}{(.500 \pm .04)}$	$\frac{9.5 \pm 0.4}{(.375 \pm .015)}$	$\frac{1.0 \pm 0.4}{(.040 \pm .015)}$
UW15	15	0.01 to 91k	$\frac{48 \pm 1.0}{(1.875 \pm .04)}$	$\frac{12.7 \pm 1.0}{(.500 \pm .04)}$	$\frac{15.9 \pm 1.0}{(.625 \pm .04)}$	$\frac{12.7 \pm 0.4}{(.500 \pm .015)}$	$\frac{1.0 \pm 0.4}{(.040 \pm .015)}$

Notes:

¹ For non-inductive windings, divide maximum resistance by 2.

² Lead Diameter: 18 AWG = 0.040" / 20 AWG = 0.032".

Specification	Value
Tolerances	$\pm 0.01\%$ to $\pm 10\%$ (1% Standard)
Temperature Coefficient	>10 Ω : ± 20 PPM/ $^{\circ}\text{C}$ 1 Ω to 10 Ω : ± 50 PPM/ $^{\circ}\text{C}$ <1 Ω : Contact Bourns . Other TCR values available upon request.
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 (anti-arc design) All welded terminations

Additional Information

Click these links for more information:



WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

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

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

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UW Series – Riedon™ Ceramic Wirewound Resistors by Bourns

BOURNS®

Environmental Performance

Test (MIL-STD 202)	ΔR
Dielectric	$\pm 0.2\% + 0.05\ \Omega$
Load Life	$\pm 1\% + 0.05\ \Omega$
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 (5 s)	$\pm 0.2\% + 0.05\ \Omega$
Shock	$\pm 0.1\% + 0.05\ \Omega$
Vibration	$\pm 0.1\% + 0.05\ \Omega$

How To Order

UW - 5 4R J 1

Model _____

UW (standard)
UWN (non-inductive)
UWS (built-in standoff)

Power Rating _____

2 = 2 10 = 10
3 = 3 15 = 15
5 = 5

Resistance Code _____

For values <1K Ω , "R" represents decimal point
(Example: 5R = 5 Ω)
For values $\geq 1K\ \Omega$, "K" represents decimal point
(Example 1K = 1K Ω , 1K5 = 1.5K Ω)

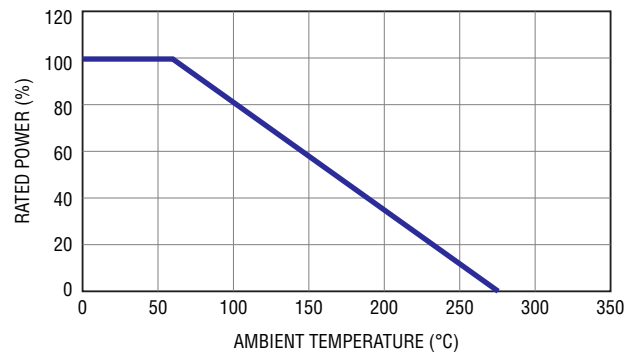
Tolerance _____

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

Internal Use _____

**[Contact Bourns](#) for tolerances $\leq \pm 0.01\%$.

Power Derating Curve



Packaging Specifications

Tray	
UW2	70 pcs./pk.
UW3	40 pcs./pk.
UW5	40 pcs./pk.
UW10	30 pcs./pk.
UW15	24 pcs./pk.

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REV. 10/24

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