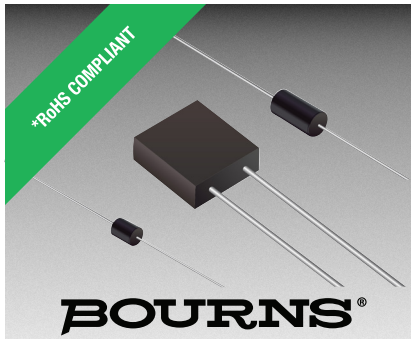




Features

- Formerly a Riedon™ product
- Resistance tolerances to $\pm 1\%$
- TCR to ± 6000 PPM/°C
- Flame & moisture resistant protective encapsulation
- All welded construction
- RoHS compliant*

Additional Information

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RTDW Series – Riedon™ Precision Wirewound Temperature Sensors by Bourns

Electrical Characteristics

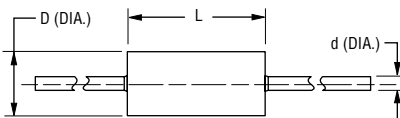
Specification	Value	
Standard Resistance Values	100 Ω , 500 Ω , 1 K Ω (referenced at 25 °C, others on request) ¹	
Temperature Range	0 °C to +100 °C	
Recommended Measurement Current	100 Ω - 1 mA to 7 mA 500 Ω - 0.7 mA to 3 mA 1 KΩ - 0.1 mA to 1 mA	
Response Time (approximate) 100 °C / 25 °C, still air, 50 %, 90 %	$t_{0.5} = 40$ seconds	$t_{0.9} = 100$ seconds
Stability	< 100 PPM/°C / year	
Terminations	100 % matte tin plating over copper	
Processing	Meets the soldering requirements of MIL-STD-202, Method 208	
Operating Conditions	RTDW series temperature sensors may not be used in unprotected moist environments or in aggressive atmospheres. User should verify suitability on a case by case basis.	

¹ Other resistance value may be available - please contact Bourns.

Product Dimensions

RTDW1²

Diameter "D"	$\frac{3.2 \pm 0.13}{(.125 \pm .005)}$	
Length "L"	$\frac{6.6 \pm 0.64}{(.260 \pm .025)}$	
Lead Diameter ³ "d"	0.5 (.020)	0.6 (.025)



² Other sizes available, please contact Bourns for additional information.

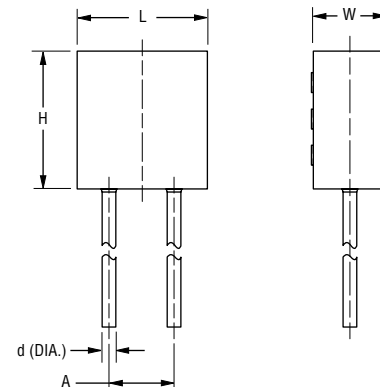
³ Where more than one lead diameter is listed / the **bold** value is Standard.

Lead length = 24.5 mm (1-inch) min.

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

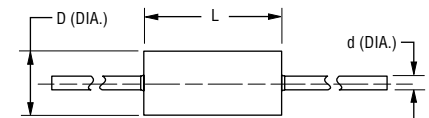
RTDW2²

Width "W"	$\frac{3.6 \pm 0.25}{(.140 \pm .010)}$
Height "H"	$\frac{6.4 \pm 0.64}{(.250 \pm .025)}$
Length "L"	$\frac{6.9 \pm 0.25}{(.270 \pm .010)}$
Lead Diameter "d"	$\frac{0.8}{(.032)}$
Lead Spacing "A"	$\frac{3.2}{(.125)}$



RTDW3²

Diameter "D"	$\frac{6.4 \pm 0.13}{(.250 \pm .005)}$	
Length "L"	$\frac{9.5 \pm 0.64}{(.375 \pm .025)}$	
Lead Diameter ³ "d"	0.8 (.032)	0.6 (.025)



*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.

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CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov



RTDW Series – Riedon™ Precision Wirewound Temperature Sensors by Bourns

BOURNS®

How To Order

RTDW 1 N - 1K F 1

Model _____

Size _____

1
2
3

TCR Code (PPM/°C) _____

N = 6000
B = 4500
R = 3500

Resistance Code _____

100R = 100 Ohms
500R = 500 Ohms
1K = 1K Ohms

Tolerance in Percent _____

F = ±1 %
J = ±5 %

Internal Use _____

Packaging Specifications

All models 100 pcs. per bag

Common Temperature Sensing Alloys

Alloy	TCR ±300 PPM/°C (0 °C - 100 °C, 25 °C reference)	Ordering Code
Nickel 99.9%	+6000	N
Balco	+4500	B
Rediseal	+3500	R

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REV. 09/25

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