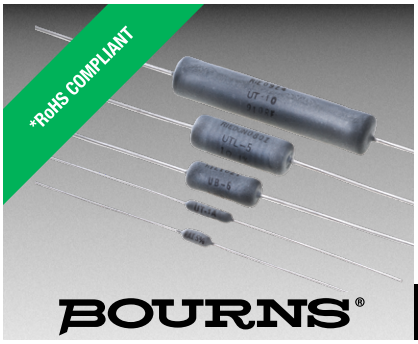


Features

- Formerly a Riedon™ product
- Resistances 0.02 to 320k Ω
- Resistance tolerances as low as ±0.01 %
- Power rating: 1 to 13 watts
- Excellent pulse handling
- Low TCR: ±20 PPM/°C standard
- Operating temperature range: -55 °C to +350 °C ("V" Rating)
- Designed to MIL-R-26 / MIL-R-39007 power ratings
- Silicone coated power resistor
- Non-inductive windings available
- RoHS compliant*

UT Series – Riedon™ High Temperature Power Resistors by Bourns

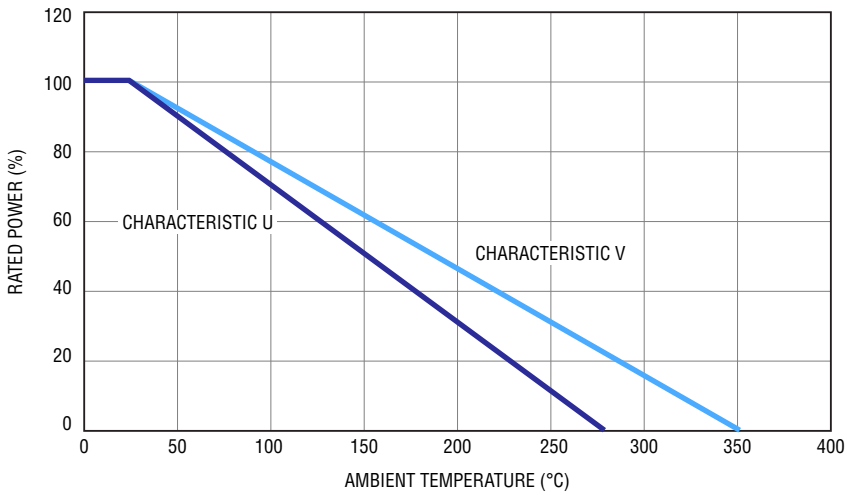
Specifications

Specification	Value
Tolerances	±0.01 % to ±10 % (1 % Standard)
Temperature Coefficient	>10 Ω: ±20 PPM/°C 1 Ω to 10 Ω: ±50 PPM/°C <1 Ω: Other TCR values available. Contact Bourns.
Temperature Range	Characteristic U: -55 °C to +275 °C Characteristic V: -55 °C to +350 °C
Maximum Working Voltage	√ (P * R)
Dielectric Strength	UT1 / UT1/2A / UT1/2 / UT1A: 500 VAC; All Others: 1000 VAC
Construction	Centerless ground ceramic core Matte tin over copper Flame resistant / high temperature / trivalent / inorganic Silicone coating All welded terminations

Environmental Performance

Specification (MIL-STD 202)	ΔR	
	Characteristic U	Characteristic V
Dielectric	±0.2 % + 0.05 Ω	±0.2 % + 0.05 Ω
Load Life	±1 % + 0.05 Ω	±3 % + 0.05 Ω
Storage	±0.2 % + 0.05 Ω	±2 % + 0.05 Ω
Moisture Resistance	±0.2 % + 0.05 Ω	±2 % + 0.05 Ω
Thermal Shock	±0.2 % + 0.05 Ω	±2 % + 0.05 Ω
5X Overload (5 s)	±0.2 % + 0.05 Ω	±2 % + 0.05 Ω
Shock	±0.1 % + 0.05 Ω	±0.2 % + 0.05 Ω
Vibration	±0.1 % + 0.05 Ω	±0.2 % + 0.05 Ω

Power Derating Curves



Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

How To Order

UT 5 - 25R F 1

Model
- UT (standard)
- UTN (non-inductive)

Power Rating Code
(See Specifications and Dimensions table on page 2)

Resistance Code
- For values ≤10K Ω, "R" represents decimal point (Example: 25R = 25 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 %.

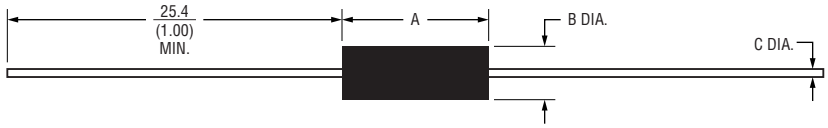
Note: Characteristic U is standard; Contact Bourns for Characteristic V.

WARNING
Cancer and Reproductive Harm
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.

UT Series – Riedon™ High Temperature Power Resistors by Bourns

Specifications and Dimensions



Model & Power Rating Code	Power Rating (W)		Max. Ohms[2] (Ω)	Dimensions			Designed to Mil-R-26 / MIL-R-39007
	U	V		A	B[3]	C[1]	
UT1	0.1	0.25	500	3.8 ± 1.6 (.150 ± .062)	2.0 ± 0.8 (.078 ± .031)	0.46 ± 0.05 (.018 ± .002)	—
UT1/2A	0.4	0.5	2.5k	6.4 ± 1.6 (.250 ± .062)	2.4 ± 0.8 (.094 ± .031)	**0.5 ± 0.05 (.020 ± .002)** 0.6 ± 0.05 (.025 ± .002)	—
UT1/2	0.75	0.9	7.5k	8.4 ± 1.6 (.330 ± .062)	2.4 ± 0.8 (.094 ± .031)		—
UT1A	1.0	1.5	10k	10.3 ± 1.6 (.406 ± .062)	2.4 ± 0.8 (.094 ± .031)		RW-70
UT2	1.5	2.0	12.5k	8.9 ± 1.6 (.350 ± .062)	4.0 ± 0.8 (.156 ± .031)	0.8 ± 0.05 (.032 ± .002)	—
UT2A	2.5	3.0	22k	12.7 ± 1.6 (.500 ± .062)	4.7 ± 0.8 (.187 ± .031)		RW-69
UT2B	3.0	3.75	22k	14.2 ± 1.6 (.560 ± .062)	4.7 ± 0.8 (.187 ± .031)		RW-79
UT2C	3.0	4.0	40k	12.7 ± 1.6 (.500 ± .062)	6.4 ± 0.8 (.250 ± .031)	**1.0 ± 0.05 (.040 ± .002)** 0.8 ± 0.05 (.032 ± .002)	—
UT2E	3.0	3.5	30k	12.7 ± 1.6 (.500 ± .062)	5.1 ± 0.8 (.200 ± .031)	0.8 ± 0.05 (.032 ± .002)	—
UT3	4.0	5.5	45k	17.1 ± 1.6 (.675 ± .062)	6.9 ± 0.8 (.270 ± .031)	**1.0 ± 0.05 (.040 ± .002)** 0.8 ± 0.05 (.032 ± .002)	—
UT5	5.0	6.5	91k	22.2 ± 1.6 (.875 ± .062)	7.9 ± 0.8 (.312 ± .031)	1.0 ± 0.05 (.040 ± .002)	RW-74
UT5A	5.0	6.5	65k	24.6 ± 1.6 (.970 ± .062)	5.2 ± 0.8 (.250 ± .031)	0.8 ± 0.05 (.032 ± .002)	—
UT6	5.0	6.5	95k	26.0 ± 1.6 (1.025 ± .062)	7.9 ± 0.8 (.312 ± .031)	1.0 ± 0.05 (.040 ± .002)	RW-67
UT7A	7.0	9.0	150k	35.0 ± 1.6 (1.375 ± .062)	9.5 ± 0.8 (.375 ± .031)		—
UT7B	7.0	9.0	100k	35.6 ± 1.6 (1.400 ± .062)	7.9 ± 0.8 (.312 ± .031)	0.8 ± 0.05 (.032 ± .002)	—
UT7C	7.0	9.0	154k	31.0 ± 1.6 (1.220 ± .062)	7.9 ± 0.8 (.312 ± .031)	1.0 ± 0.05 (.040 ± .002)	—
UT10	10	13	260k	45.2 ± 1.6 (1.780 ± .062)	9.5 ± 0.8 (.375 ± .031)		RW-78
UT15	15	—	320k	46.0 ± 1.6 (1.810 ± .062)	13.0 ± 0.8 (.510 ± .031)	1.5 ± 0.05 (.050 ± .002)	—

Notes:
[1] Lead Diameter: 18 AWG = 0.040 ″ / 20 AWG = 0.032 ″ / 22 AWG = 0.025 ″ / 24 AWG = 0.020 ″ / 25 AWG = 0.018 ″.
Where more than one lead is listed / the **bold** value is standard.
[2] For non-inductive windings / divide maximum resistance by 2.
[3] For non-inductive winding where R ≤ 0.10 ohms, tolerance is +1.6/-0.0 mm (+0.063/-0.00 ″).

Standard Package Quantities

Model & Power Rating Code	Bulk	10 ″ Reel	12 ″ Reel	14 ″ Reel
UT1	1000	N/A	N/A	N/A
UT1/2A		2000	3000	5000
UT1/2				
UT1A				
UT2				
UT2A		500	1500	3000
UT2B				
UT2C			1000	1500
UT2E				
UT3		N/A	500	1000
UT5				
UT5A		500	1000	1500
UT6		N/A	500	1000
UT7A				750
UT7B				
UT7C				
UT10				

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