



Type UT and UB Silicone Coated Power Resistors

- Resistances from 0.005 to 260K Ohms
- Power Rating 0.1 to 18 Watts
- Resistance Tolerances to $\pm 0.01\%$
- Low TCR: ± 20 ppm/ $^{\circ}\text{C}$ Standard
- MIL-R-26 / MIL-R-39007 Power Ratings
- Temperature Range: -55°C to $+350^{\circ}\text{C}$ ("V" Rating)
- Non-Inductive Windings Available



Riedon offers two versions of these wirewound power resistors. The UT Series has excellent performance and reliability in a moderate package size. The UB Series provides higher power ratings in the same size, yet meets the performance, environmental, and life stability requirements of the UT package.

SPECIFICATIONS

Type	Wattage Rating (Watts)		Maximum Resistance (Ohms)	Dimensions		Lead Dia. AWG * C ± 0.002 "	Max. Working Voltage (Volts)	MIL-R-26 / MIL-R-39007
	U	V		Length A ± 0.062 "	Diameter B ± 0.031 "			
UT-1	0.1	0.25	500	0.150	0.078	25	8.5	
UT-1/2A	0.4	0.5	2.5K	0.250	0.078	24 / 22	20	
UT-1/2	0.75	0.9	7.5K	0.330	0.078	24 / 22	29	
UT-1A	1.0	1.5	10K	0.406	0.094	24 / 22	52	RW-70
UT-2	1.5	2.0	12.5K	0.350	0.156	22 / 20	60	
UT-2A	2.5	3.0	22K	0.500	0.187	20	130	RW-69
UT-2B	3.0	3.75	22K	0.560	0.187	20	140	RW-79 / RWR-89
UT-2C	3.0	4.0	40K	0.500	0.250	20 / 18	138	
UT-2D	3.0	3.5	30K	0.500	0.187	20	140	
UT-2E	3.0	3.5	30K	0.500	0.200	20	140	
UT-3	4.0	5.5	45K	0.625	0.250	20 / 18	210	
UT-5	5.0	6.5	91K	0.875	0.312	18	360	RW-74 / RWR-74
UT-5A	5.0	6.5	65K	0.970	0.203	20 / 18	390	
UT-6	5.0	6.5	95K	1.000	0.312	18	504	RW-67
UT-7A	7.0	9.0	150K	1.375	0.375	18	650	
UT-7B	7.0	9.0	100K	1.400	0.312	18	590	
UT-7C	7.0	9.0	154K	1.220	0.312	18	620	
UT-10	10.0	13.0	260K	1.780	0.375	18	850	RW-78 / RWR-78

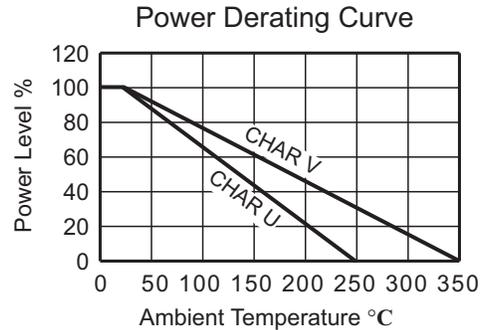
* Lead Diameter: 18 AWG = 0.040", 20 AWG = 0.032", 22 AWG = 0.025", 24 AWG = 0.020", 25 AWG = 0.018"

SPECIFICATIONS (Continued)

Power Ratings and Temperature Range:

UT and UB Series have two power ratings, depending on operating temperature and stability requirements.

Characteristic	Maximum Hotspot Temp.	Temperature Range
“U”	+250°C	-55°C to +250°C
“V”	+350°C	-55°C to +350°C



Type	Wattage Rating (Watts)		Maximum Resistance (Ohms)	Dimensions		Lead Dia. AWG * C ±0.002"	Max. Working Voltage (Volts)	MIL-R-26 / MIL-R-39007
	U	V		Length A ±0.062"	Diameter B ±0.031"			
UB-1	1.0	1.5	3.4K	0.250	0.085	24 / 22	33	RW-81 / RWR-81
UB-2	1.5	2.0	7.5K	0.312	0.078	24 / 22	42	RWR-82
UB-3	2.0	3.0	10K	0.406	0.094	24 / 22	80	RW-80 / RWR-80
UB-5	4.0	5.0	25K	0.562	0.188	20	162	
UB-5C	5.0	7.0	32K	0.500	0.218	18	194	
UB-6	6.0	8.0	50K	0.625	0.250	18	258	
UB-10	7.0	10.0	95K	0.875	0.312	18	425	RW-84
UB-12	10.0	12.0	150K	1.200	0.312	18	607	
UB-15	15	18	260K	1.780	0.375	18	1050	

* Lead Diameter: 18 AWG = 0.040", 20 AWG = 0.032", 22 AWG = 0.025", 24 AWG = 0.020", 25 AWG = 0.018"

- Tolerances** - ± 0.01% to ± 10% (1% Standard)
- Temperature Coefficient** - 1 to 10Ω, ±50ppm/°C
>10Ω, ± 20ppm/°C
<1Ω, (Call factory)
- Dielectric Strength** - 500 VAC: UT-1, 1/2A, 1/2, 1A
UB-1, 2, 3
1000 VAC: All others

Construction-

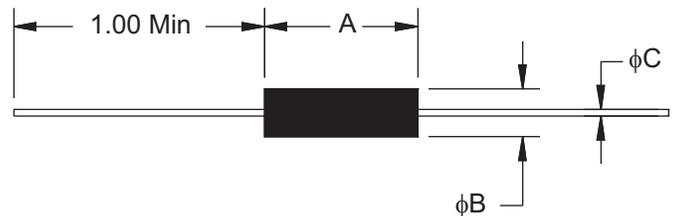
Controlled low tension windings on centerless ground ceramic cores. All welded terminations. Special high-temperature trivalent inorganic silicone material that will not support combustion and will withstand degreasing solvents and aqueous cleaning. Leads are tinned copper or copperweld and are solderable and weldable.

Ordering information:

Part Number - Resistance - Tolerance - TCR

Example: **UT-5 - 25K - 0.1 - 20**

Note for non-inductive windings: Insert the Letter "N" (example: UNT-3)
Divide maximum resistance by two, Multiply working voltage by 0.707.



Environmental Performance (MIL-STD 202)

Condition	ΔR
Dielectric	± 0.2% + 0.05Ω
Load Life	± 0.5% + 0.05Ω
Storage	± 0.2% + 0.05Ω
Moisture Resistance	± 0.2% + 0.05Ω
Thermal Shock	± 0.2% + 0.05Ω
5X Overload for 5 sec.	± 0.2% + 0.05Ω
Shock	± 0.1% + 0.05Ω
Vibration	± 0.1% + 0.05Ω