

# DRBY Glazed High Power Ceramic Tube Wirewound Resistors

Type A: DRBY Fixed Series

Type B: DSBY Variable Series

Power Rating: 8W-500W

Resistance Value: 1Ω-30kΩ

Resistance Tolerance: ±1%, ±5%, ±10%



[www.topresistor.com](http://www.topresistor.com)

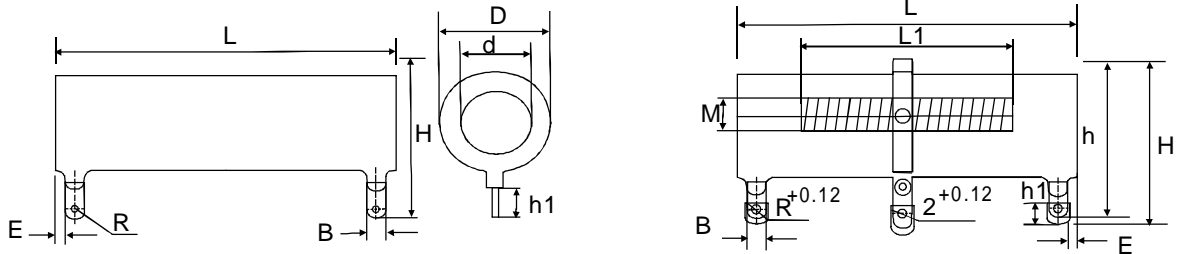
## ● Construction:

A tubular ceramic has two terminals, and is wound with copper wire or chromium alloy wire to provide the resistance, then the surface coated with high temperature glaze. After the semi-finished resistor cool and dry, insulation is applied through a temperature process and then the mounts are attached. If made into wave-type, not only eliminate the parasitic inductance of the resistor, but also improve the heat dissipation.

## ● Features:

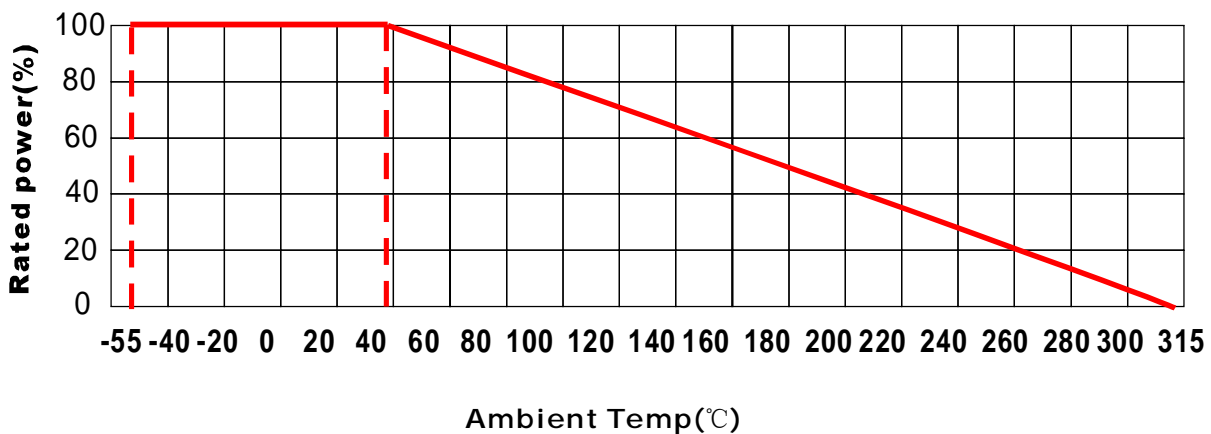
1. Surface glazed, won't be easily polluted or eroded by chemistry gas, high insulating capacity, can resist humidity and heat well, can be used in the atrocious environment.
2. Small size, high power rating, good overload and heat durability capacity, the useful time is longer than the others.
3. Widely used for PCB installation, DC circuits, and low frequency AC circuits.
4. For custom specifications, please contact us to discuss the details.
5. Conforms to the ROHS standard and the LEAD-FREE non-lead standard.
6. Delivery: 7-10 days

### ● Dimensions



Power Rating	Fixed Resistance	Variable Resistance	Dimensions(mm)											
			L	D	d	H	h	L1	M	E	B	R	h1	
8W	5.1-3.3K		35±1.5	14±2	5.5±0.5	31±2	28.5±2.5	~	~					
10W	5.1-3.3K	5.1-200	41±1.5					20±2						
16W	5.1-3.3K	5.1-220	51±1.5	17±2	8±0.5	34±2	31±2.5	23±2	6±2	3.5±0.8	4.5	2	8±1.5	
20W	5.1-4K	5.1-430	51±2					30±2						
25W	10-4K	10-510	51±2	21±2.5	12±0.8	39±2	35±2.5	30±2	7±2	4.5±1	6	3	8±1.5	
30W	10-5K	10-1K	71±2.2					44±2						
40W	20-7.5K	20-1.2K	87±2.2					57±2						
50W	20-10K	20-1.5K	91±2.4	29±3	20±1.1	47±2	43±3	60±2	7±2	4.5±1	6	3	8±1.5	
80W	24-12K	24-2K	140±3.2					110±2						
100W	24-15K	24-2.7K	170±3.5					140±2						
150W	20-30K	20-4.3K	215±4					185±2						
200W	4.7-12K	5.1-3K	215±2	38±3	25±0.7	60.5±1.2	58±2	160±3	7±2	8±1	9	4	11±1.5	
200/250W	4.7-12K	5.1-3K	266±2	30±2	16±0.3	50±2	47±5	210±3						
300W	4.7-12K	5.1-3K	266±2	36±2	20±0.3	58.5±2	58±2	180±3	8±2	8±1	16	8	17±1.5	
400W	5.1-10K	6.2-3K	250±2	54±2	30±2	76.5±1.5	79±3	230±3						
500W	5.1-10K	6.2-3K	300±2											

### ● Derating



## ● Performance Specifications

Test item	Test condition	Specifications
Resistance tolerance	JIS-C-5202 5-1	Resistance Nominal Tolerance $1 \leq R < 10 \leq R \pm 5\%(J) \pm 10\%(K)$
Temperature coefficient	JIS-C-5202 5-2	$\pm 350 \text{ PPM}/^\circ\text{C}$ Max
Power rating load	JIS-C-5202 5-4 40°C, power rating 1H	$\Delta R \leq \pm(1\% + 0.1\Omega)$ Surface temperature $\leq 350^\circ\text{C}$
Short-term overload	JIS-C-5202 5-5 1000% rated power 5s	Free of appearance or structural irregularity $\Delta R \leq \pm(2\% + 0.1\Omega)$
Insulation resistance	JIS-C-5202 5-6 1000V DC	100 M $\Omega$ Min
Dielectric withstanding voltage	JIS-C-5202 5-7 1000VDC 1 minute Between terminal and anchor stand	Free of appearance or structural irregularity $\Delta R \leq \pm(0.1\% + 0.05\Omega)$
Terminal strength	JIS-C-5202 6-1 8kg 30 seconds	Free of appearance or structural irregularity
Vibration	JIS-C-5202 6-3 1.5mm, 10-50-10Hz/min X-Y-Z2 hours each	Free of appearance or structural irregularity $\Delta R \leq \pm(1\% + 0.05\Omega)$
Thermal shock	JIS-C-5202 7-3 Room temp 30 min ON-55°C 15 min OFF	Resistor free of structural irregularity crack of silicon cement surface $\Delta R \leq \pm(2\% + 0.1\Omega)$
Humidity	JIS-C-5202 7-5 40°C 90%RH 240 hours	Free of appearance or structural irregularity Surface coating crack $\Delta R/R \leq \pm(31\% + 0.1\Omega)$
Load life	JIS-C-5202 7-10 90 minutes ON - 30 minutes OFF 500 hours	Free of appearance or structural irregularity Surface coating crack $\Delta R/R \leq \pm(1\% + 0.05\Omega)$

## ● How to order

DRBY	50W	50 $\Omega$	J
①	②	③	④
Type DRBY DSBY	Power Rating 8W-500W 10W-500W	Resistance Value 5.1 $\Omega$ -30k $\Omega$ 5.1 $\Omega$ -4.3k $\Omega$	Resistance Tolerance $\pm 1\%, \pm 2\%, \pm 5\%, \pm 10\%$