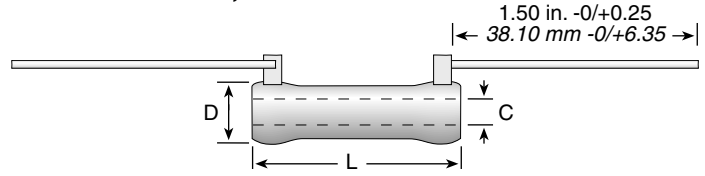




200 Series

Brown Devil®, Vitreous Enamel Power Resistors



Ohmite's Brown Devils® are small, exceptionally durable power resistors. They feature all-welded construction and rugged, flame resistant conformal lead free vitreous enamel coating to ensure successful performance under high temperatures.

The wirewound 200 Type resistors have a hollow-core construction, which accommodates rigid mounting with brackets or thru bolts.

Mounting brackets not included with resistors.

FEATURES

- Rugged lead free vitreous enamel coating
- All-welded construction.
- Self supporting lead mounting option.
- Higher power ratings.
- Flame-resistant lead free vitreous enamel coating.
- RoHS compliant product available Jan. 2006 Add "E" suffix to part number to specify.

See page 34 for mounting hardware

SPECIFICATIONS

Material

Coating: lead free vitreous enamel.

Core: Ceramic.

Terminals: Tinned axial lead.

Derating: Linearly from 100% @ +25°C to 0% @ +350°C.

Electrical

Tolerance: 1Ω and over: ±5% under 1Ω: ±10%

Power rating: Based on 25°C free air rating.

Overload: 10 times rated wattage for 5 seconds.

Temperature coefficient: 5Ω and under: ±400 ppm/°C Above 5Ω: ±260 ppm/°C

To calculate max. amps: use the formula $\sqrt{P/R}$.

Series	Wattage	Ohms	Dimensions (in. / mm)		Lead Gauge	Max. Volt. *
			Length	Diam.		
B5	5.25	0.1-20K	0.625 / 15.88	0.250 / 6.35	0.135 / 3.43	20 187
B8	8.0	0.03-25K	1.000 / 25.40	0.313 / 7.94	0.188 / 4.76	18 250
B12	12.0	0.08-51K	1.750 / 44.45	0.313 / 7.94	0.188 / 4.76	18 625
B20	20.0	0.1-100K	2.000 / 50.80	0.438 / 11.11	0.250 / 6.35	18 750

Non-Inductive versions available. Insert "N" before tolerance code. **Example** - B5NJ10R
Also available in low cost Centohm coating. Consult Factory.
* Maximum Voltage is based on Ohm's Law $[V=\sqrt{W \cdot R}]$ as limited by the resistance value of specified product

ORDERING INFO

Wattage	Non-Inductive Winding Optional (blank = std. winding)	RoHS Compliant
B 8 N J 5 R 0 E		
Series	Tolerance F = 1% H = 3% J = 5% K = 10%	Ohms 1R0 = 1 Ω 250 = 250 Ω 1K0 = 1,000 Ω 25K = 25,000 Ω 25K5 = 25,500 Ω

MADE-TO-ORDER PARTS

Core Diameter See "Core and Terminal Selection"	Non-Inductive Winding Optional (blank = std. winding)	RoHS Compliant
2 0 0 8 D 5 R 0 0 N J E		
Coating 200 = Vitreous 400 = Silicone Ceramic	Wattage 3 5.25 8 12 20	Ohms R500 = 0.500 Ω 1R00 = 1 Ω 250R = 250 Ω 1K00 = 1,000 Ω 25K0 = 25,000 Ω 25K5 = 25,500 Ω
		Tolerance F = 1% H = 3% J = 5% K = 10%

See page 40 for custom core info

STANDARD PART NUMBERS FOR STANDARD RESISTANCE VALUES

Wattage		Wattage		Wattage		Wattage		Wattage	
Ohmic value	Part No. Prefix Suffix	Ohmic value	Part No. Prefix Suffix	Ohmic value	Part No. Prefix Suffix	Ohmic value	Part No. Prefix Suffix	Ohmic value	Part No. Prefix Suffix
0.5	KR50	20	20R	270	270	2,250	2K25	16,000	16K
1	1R0	22	22R	300	300	2,400	2K4	17,500	17K5
1.1	1R1	24	24R	330	330	2,500	2K5	18,000	18K
1.2	1R2	25	25R	350	350	2,700	2K7	20,000	20K
1.3	1R3	27	27R	360	360	2,750	2K75	22,500	22K5
1.5	1R5	30	30R	390	390	3,000	3K0	25,000	25K
1.6	1R6	33	33R	400	400	3,300	3K3	30,000	30K
1.8	1R8	35	35R	430	430	3,500	3K5	35,000	35K
2	2R0	36	36R	450	450	3,600	3K6	40,000	40K
2.2	2R2	39	39R	470	470	3,900	3K9	45,000	45K
2.4	2R4	40	40R	500	500	4,000	4K0	50,000	50K
2.7	2R7	43	43R	510	510	4,300	4K3	55,000	55K
3	3R0	47	47R	560	560	4,500	4K5	60,000	60K
3.3	3R3	50	50R	600	600	4,700	4K7	65,000	65K
3.6	3R6	51	51R	620	620	5,000	5K0	70,000	70K
3.9	3R9	56	56R	650	650	5,100	5K1	75,000	75K
4	4R0	62	62R	680	680	5,600	5K6	80,000	80K
4.3	4R3	68	68R	700	700	6,000	6K0	85,000	85K
4.7	4R7	75	75R	750	750	6,200	6K2	90,000	90K
5	5R0	82	82R	800	800	6,800	6K8	95,000	95K
5.1	5R1	91	91R	820	820	7,000	7K0	100,000	100K
5.6	5R6	100	100	900	900	7,500	7K5		
6.2	6R2	110	110	910	910	8,000	8K0		
6.8	6R8	120	120	1,000	1K0	8,200	8K2		
7.5	7R5	125	125	1,100	1K1	8,500	8K5		
8.2	8R2	130	130	1,200	1K2	9,000	9K0		
9.1	9R1	150	150	1,250	1K25	9,100	9K1		
10	10R	160	160	1,300	1K3	10,000	10K		
11	11R	180	180	1,500	1K5	11,000	11K		
12	12R	200	200	1,600	1K6	12,000	12K		
13	13R	220	220	1,750	1K75	12,500	12K5		
15	15R	225	225	1,800	1K8	13,000	13K		
16	16R	240	240	2,000	2K0	13,500	13K5		
18	18R	250	250	2,200	2K2	15,000	15K		

+ = Most popular Standard values
✓ = Standard values
✦ = Non-Standard values subject to minimum handling charge per item
Shaded values involve very fine resistance wire and should not be used in critical applications without burn-in and/or thermal cycling.