



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

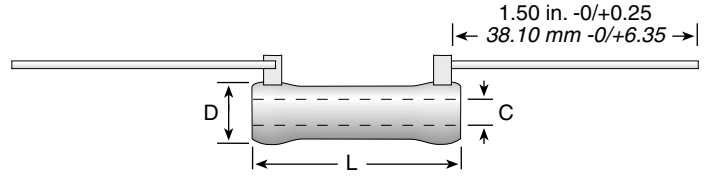
Tolerance: 1Ω and over: ±5% under 1Ω: ±10%

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	Voltage
			Length	Diam.	Core		
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.

ORDERING INFO

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

MADE-TO-ORDER PARTS

Coating	Wattage	Ohms	Tolerance
200 = Vitreous Enamel	3	R500 = 0.500 Ω	F = 1%
400 = Silicone Ceramic	5.25	1R00 = 1 Ω	H = 3%
	8	250R = 250 Ω	J = 5%
	12	1K00 = 1,000 Ω	K = 10%
	20	25K0 = 25,000 Ω	
		25K5 = 25,500 Ω	

See "Core and Terminal Selection" for Core Diameter and Non-Inductive Winding options.

STANDARD PART NUMBERS FOR STANDARD RESISTANCE VALUES

Ohmic value	Part No. Prefix Suffix	Wattage	Ohmic value	Part No. Prefix Suffix	Wattage	Ohmic value	Part No. Prefix Suffix	Wattage	Ohmic value	Part No. Prefix Suffix	Wattage
0.5	KR50	5.25	20	20R	5.25	270	270	5.25	2,250	2K25	5.25
1	1R0	8	22	22R	8	300	300	8	2,400	2K4	8
1.1	1R1	12	24	24R	12	330	330	12	2,500	2K5	12
1.2	1R2	20	25	25R	20	350	350	20	2,700	2K7	20
1.3	1R3		27	27R		360	360		2,750	2K75	
1.5	1R5		30	30R		390	390		3,000	3K0	
1.6	1R6		33	33R		400	400		3,300	3K3	
1.8	1R8		35	35R		430	430		3,500	3K5	
2	2R0		36	36R		450	450		3,600	3K6	
2.2	2R2		39	39R		470	470		3,900	3K9	
2.4	2R4		40	40R		500	500		4,000	4K0	
2.7	2R7		43	43R		510	510		4,300	4K3	
3	3R0		47	47R		560	560		4,500	4K5	
3.3	3R3		50	50R		600	600		4,700	4K7	
3.6	3R6		51	51R		620	620		5,000	5K0	
3.9	3R9		56	56R		650	650		5,100	5K1	
4	4R0		62	62R		680	680		5,600	5K6	
4.3	4R3		68	68R		700	700		6,000	6K0	
4.7	4R7		75	75R		750	750		6,200	6K2	
5	5R0		82	82R		800	800		6,800	6K8	
5.1	5R1		91	91R		820	820		7,000	7K0	
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.