

Ohmite's Brown Devil® is a small, exceptionally durable power resistor. It features all-welded construction and rugged, flame resistant conformal lead free vitreous enamel coating to ensure successful performance under high temperatures.

The wirewound 200 Series has 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 terminal mounting option.
- Higher power ratings.
- Flame-resistant lead free vitreous enamel coating.
- RoHS compliant product available. Add "E" suffix to part number to specify.

See page 36
for mounting hardware

SPECIFICATIONS

Material

Coating: lead free vitreous enamel

Core: Ceramic.

Terminals: Tinned axial; RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu

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

Electrical

Tolerance: 1Ω+: ±5%
under 1Ω: ±10%

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

Overload: 10 times rated wattage for 5 seconds.

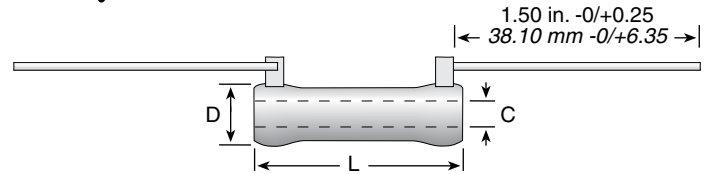
Temperature coefficient: 5Ω and under: ±400 ppm/°C
Above 5Ω: ±260 ppm/°C

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



200 Series

Brown Devil® Vitreous Enamel Power



			Dimensions (in. / mm)			Lead Gauge	Max. Volt. *
Series	Wattage	Ohms	L	D	C		
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** - B5NJ10RE
Also available in low cost Centohm or Silicone coating. Consult Ohmite.
* Maximum Voltage is based on Ohm's Law $[V=\sqrt{P \cdot R}]$ as limited by the resistance value of specified product

ORDERING INFO

Coating	Non-Inductive Winding	RoHS Compliant
Blank = Vitreous C = Centohm S = Silicone	Optional (blank = std. winding)	
B 8 N J 5 R 0 0 E		
Series	Wattage	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

Non-Inductive Winding	Core Diameter	RoHS Compliant
Optional (blank = std. winding)	See "Core and Terminal Selection"	
2 0 0 N 8 D 5 R 0 0 0 J E		
Coating	Wattage	Ohms
200 = Vitreous 400 = Silicone Ceramic	3 5.25 8 12 20	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%

STANDARD PART NUMBERS FOR 200 SERIES

Wattage					Wattage					Wattage					Wattage					Wattage								
Ohmic value	Part No.	5.25	8	12	20	Ohmic value	Part No.	5.25	8	12	20	Ohmic value	Part No.	5.25	8	12	20	Ohmic value	Part No.	5.25	8	12	20					
	Prefix						Suffix						Prefix						Suffix					Prefix	Suffix	Prefix	Suffix	Prefix
0.5	R50E					20	20RE					270	270E					2,250	2K25E					16,000	16KE			
1	1R0E					22	22RE					300	300E					2,400	2K4E					17,500	17K5E			
1.1	1R1E					24	24RE					330	330E					2,500	2K5E					18,000	18KE			
1.2	1R2E					25	25RE					350	350E					2,700	2K7E					20,000	20KE			
1.3	1R3E					27	27RE					360	360E					2,750	2K75E					22,500	22K5E			
1.5	1R5E					30	30RE					390	390E					3,000	3K0E					25,000	25KE			
1.6	1R6E					33	33RE					400	400E					3,300	3K3E					30,000	30KE			
1.8	1R8E					35	35RE					430	430E					3,500	3K5E					35,000	35KE			
2	2R0E					36	36RE					450	450E					3,600	3K6E					40,000	40KE			
2.2	2R2E					39	39RE					470	470E					3,900	3K9E					45,000	45KE			
2.4	2R4E					40	40RE					500	500E					4,000	4K0E					50,000	50KE			
2.7	2R7E					43	43RE					510	510E					4,300	4K3E					55,000	55KE			
3	3R0E					47	47RE					560	560E					4,500	4K5E					60,000	60KE			
3.3	3R3E					50	50RE					600	600E					4,700	4K7E					65,000	65KE			
3.6	3R6E					51	51RE					620	620E					5,000	5K0E					70,000	70KE			
3.9	3R9E					56	56RE					650	650E					5,100	5K1E					75,000	75KE			
4	4R0E					62	62RE					680	680E					5,600	5K6E					80,000	80KE			
4.3	4R3E					68	68RE					700	700E					6,000	6K0E					85,000	85KE			
4.7	4R7E					75	75RE					750	750E					6,200	6K2E					90,000	90KE			
5	5R0E					82	82RE					800	800E					6,800	6K8E					95,000	95KE			
5.1	5R1E					91	91RE					820	820E					7,000	7K0E					100,000	100KE			
5.6	5R6E					100	100E					900	900E					7,500	7K5E					✓ = Standard values; check availability using the world-wide inventory search at www.ohmite.com These values involve very fine resistance wire and should not be used in critical applications without burn-in and/or thermal cycling: B5: 6.8K-20KΩ B8: 12.5K-25KΩ B12: 30K-51KΩ B20: 22.5K-100KΩ				
6.2	6R2E					110	110E					910	910E					8,000	8K0E									
6.8	6R8E					120	120E					1,000	1K0E					8,200	8K2E									
7.5	7R5E					125	125E					1,100	1K1E					8,500	8K5E									
8.2	8R2E					130	130E					1,200	1K2E					9,000	9K0E									
9.1	9R1E					150	150E					1,250	1K25E					9,100	9K1E									
10	10RE					160	160E					1,300	1K3E					10,000	10KE									
11	11RE					180	180E					1,500	1K5E					11,000	11KE									
12	12RE					200	200E					1,600	1K6E					12,000	12KE									
13	13RE					220	220E					1,750	1K75E					12,500	12K5E									
15	15RE					225	225E					1,800	1K8E					13,000	13KE									
16	16RE					240	240E					2,000	2K0E					13,500	13K5E									
18	18RE					250	250E					2,200	2K2E					15,000	15KE									