

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.

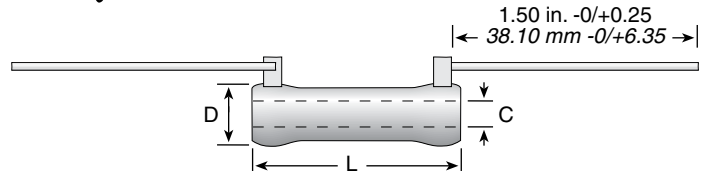
Temperature coefficient: 5Ω and under: ±400 ppm/°C
Above 5Ω: ±260 ppm/°C

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 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 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%

See web-site for custom core info

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	Ohmic value	Part No.	5.25	8	12	20
	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		✓	✓	✓ = 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			
5.6	5R6E	✓				100	100E		✓	✓	✓	900	900E		✓	✓		7,500	7K5E	✓	✓	✓							
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		✓	✓	B5: 6.8K-20KΩ B8: 12.5K-25KΩ B12: 30K-51KΩ B20: 22.5K-100KΩ					
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		✓	✓						