

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.

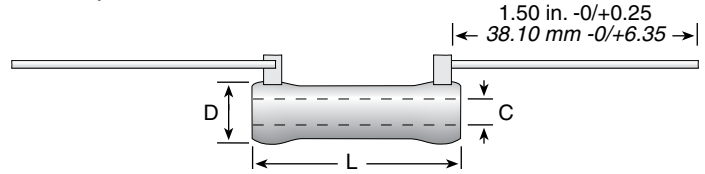
Temperature coefficient: 5Ω and under: ±400 ppm/°C
Above 5Ω: ±260 ppm/°C

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



200 Series

Brown Devil® Vitreous Enamel Power



Series	Wattage	Ohms	Dimensions (in. / mm)			Lead Gauge	Max. Volt. *
			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** - B5N10RE
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 Blank = Vitreous C = Centohm S = Silicone	Wattage	Non-Inductive Winding Optional (blank = std. winding)	RoHS Compliant
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B 8 N J 5 R 0 E

Series: B 8 N J 5 R 0 E

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

Non-Inductive Winding
Optional (blank = std. winding)

Core Diameter
See "Core and Terminal Selection"

RoHS Compliant

2 0 0 N 8 D 5 R 0 0 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 web-site for custom core info

STANDARD PART NUMBERS FOR 200 SERIES

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