

200 Series

Brown Devil® Vitreous Enamel Power



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.

SERIES SPECIFICATIONS

Series	Wattage	Ohms	Lead Gauge	Max. Voltage*
B5	5.25	0.1-20K	20	187
B8	8.0	0.03-25K	18	250
B12	12.0	0.08-51K	18	625
B20	20.0	0.1-100K	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

CHARACTERISTICS

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
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
Max. amps	To calculate, use the formula $\sqrt{P/R}$

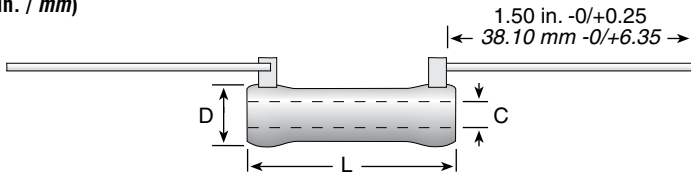
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200 Series

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DIMENSIONS

(in. / mm)



Series	Wattage	L	D	C	Lead Gauge
B5	5.25	0.625 / 15.88	0.250 / 6.35	0.135 / 3.43	20
B8	8.0	1.000 / 25.40	0.313 / 7.94	0.188 / 4.76	18
B12	12.0	1.750 / 44.45	0.313 / 7.94	0.188 / 4.76	18
B20	20.0	2.000 / 50.80	0.438 / 11.11	0.250 / 6.35	18

ORDERING INFORMATION

Standard Values

Ohmic value		Wattage		Ohmic value		Wattage		Ohmic value		Wattage		Ohmic value		Wattage							
Part No.	Prefix	Suffix	5.25	8	12	20	Part No.	Prefix	Suffix	5.25	8	12	20	Part No.	Prefix	Suffix	5.25	8	12	20	
0.5	R50E						20	20RE						270	270E						
1	1R0E						22	22RE						300	300E						
1.1	1R1E						24	24RE						330	330E						
1.2	1R2E						25	25RE						350	350E						
1.3	1R3E						27	27RE						360	360E						
1.5	1R5E						30	30RE						390	390E						
1.6	1R6E						33	33RE						400	400E						
1.8	1R8E						35	35RE						430	430E						
2	2R0E						36	36RE						450	450E						
2.2	2R2E						39	39RE						470	470E						
2.4	2R4E						40	40RE						500	500E						
2.7	2R7E						43	43RE						510	510E						
3	3R0E						47	47RE						560	560E						
3.3	3R3E						50	50RE						600	600E						
3.6	3R6E						51	51RE						620	620E						
3.9	3R9E						56	56RE						650	650E						
4	4R0E						62	62RE						680	680E						
4.3	4R3E						68	68RE						700	700E						
4.7	4R7E						75	75RE						750	750E						
5	5R0E						82	82RE						800	800E						
5.1	5R1E						91	91RE						820	820E						
5.6	5R6E						100	100E						900	900E						
6.2	6R2E						110	110E						910	910E						
6.8	6R8E						120	120E						1,000	1K0E						
7.5	7R5E						125	125E						1,100	1K1E						
8.2	8R2E						130	130E						1,200	1K2E						
9.1	9R1E						150	150E						1,250	1K25E						
10	10RE						160	160E						1,300	1K3E						
11	11RE						180	180E						1,500	1K5E						
12	12RE						200	200E						1,600	1K6E						
13	13RE						220	220E						1,750	1K75E						
15	15RE						225	225E						1,800	1K8E						
16	16RE						240	240E						2,000	2K0E						
18	18RE						250	250E						2,200	2K2E						

✓ = Standard values; check availability 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

Coating
 Blank = Vitreous
 C = Centohm
 S = Silicone

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 = 1Ω
 250 = 250Ω
 1K0 = 1,000Ω
 25K = 25,000Ω
 25K5 = 25,500Ω

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 0 J E

Coating
 200 = Vitreous
 400 = Silicone
 Ceramic

Wattage
 3
 5.25
 8
 12
 20

Ohms
 R500 = 0.500Ω
 1R00 = 1Ω
 250R = 250Ω
 1K00 = 1,000Ω
 25K0 = 25,000Ω
 25K5 = 25,500Ω

Tolerance
 F = 1%
 H = 3%
 J = 5%
 K = 10%

See website for custom core info