

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 $\sqrt{P/R}$

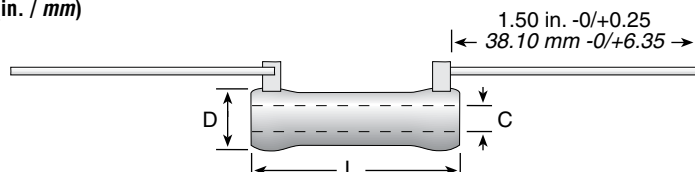
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DIMENSIONS

(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

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	Suffix		
0.5	R	50E					20	20RE						270	270E						2,250	2K25E					16,000	16KE			
1	1R	0E					22	22RE						300	300E						2,400	2K4E					17,500	17K5E			
1.1	1R	1E					24	24RE						330	330E						2,500	2K5E					18,000	18KE			
1.2	1R	2E					25	25RE						350	350E						2,700	2K7E					20,000	20KE			
1.3	1R	3E					27	27RE						360	360E						2,750	2K75E					22,500	22K5E			
1.5	1R	5E					30	30RE						390	390E						3,000	3K0E					25,000	25KE			
1.6	1R	6E					33	33RE						400	400E						3,300	3K3E					30,000	30KE			
1.8	1R	8E					35	35RE						430	430E						3,500	3K5E					35,000	35KE			
2	2R	0E					36	36RE						450	450E						3,600	3K6E					40,000	40KE			
2.2	2R	2E					39	39RE						470	470E						3,900	3K9E					45,000	45KE			
2.4	2R	4E					40	40RE						500	500E						4,000	4K0E					50,000	50KE			
2.7	2R	7E					43	43RE						510	510E						4,300	4K3E					55,000	55KE			
3	3R	0E					47	47RE						560	560E						4,500	4K5E					60,000	60KE			
3.3	3R	3E					50	50RE						600	600E						4,700	4K7E					65,000	65KE			
3.6	3R	6E					51	51RE						620	620E						5,000	5K0E					70,000	70KE			
3.9	3R	9E					56	56RE						650	650E						5,100	5K1E					75,000	75KE			
4	4R	0E					62	62RE						680	680E						5,600	5K6E					80,000	80KE			
4.3	4R	3E					68	68RE						700	700E						6,000	6K0E					85,000	85KE			
4.7	4R	7E					75	75RE						750	750E						6,200	6K2E					90,000	90KE			
5	5R	0E					82	82RE						800	800E						6,800	6K8E					95,000	95KE			
5.1	5R	1E					91	91RE						820	820E						7,000	7K0E					100,000	100KE			
5.6	5R	6E					100	100E						900	900E						7,500	7K5E					✓ = 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				
6.2	6R	2E					110	110E						910	910E						8,000	8K0E									
6.8	6R	8E					120	120E						1,000	1K0E						8,200	8K2E									
7.5	7R	5E					125	125E						1,100	1K1E						8,500	8K5E									
8.2	8R	2E					130	130E						1,200	1K2E						9,000	9K0E									
9.1	9R	1E					150	150E						1,250	1K25E						9,100	9K1E									
10	10R	0E					160	160E						1,300	1K3E						10,000	10KE									
11	11R	0E					180	180E						1,500	1K5E						11,000	11KE									
12	12R	0E					200	200E						1,600	1K6E						12,000	12KE									
13	13R	0E					220	220E						1,750	1K75E						12,500	12K5E									
15	15R	0E					225	225E						1,800	1K8E						13,000	13KE									
16	16R	0E					240	240E						2,000	2K0E						13,500	13K5E									
18	18R	0E					250	250E						2,200	2K2E						15,000	15KE									

Coating Blank = Vitreous C = Centohm S = Silicone	Wattage	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 25K5 = 25,500Ω	

Made-to-order Parts

Non-Inductive Winding Optional (blank = std. winding)	Core Diameter See "Core and Terminal Selection"	RoHS Compliant
200	N	8
D	5	R
0	0	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