

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 +: $\pm 5\%$
under 1Ω : $\pm 10\%$

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

Overload: 10 times rated wattage for 5 seconds.

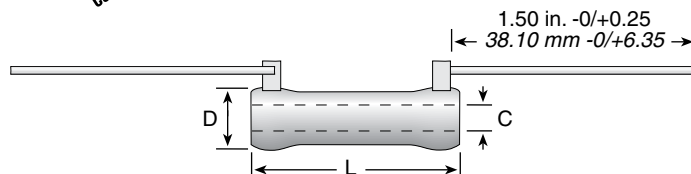
Temperature coefficient:
5Ω and under: ±400 ppm/°C
Above 5Ω: ±260 ppm/°C

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** - B5NJ10RE
Also available in low cost Centohm or Silicone coating. Consult Ohmite.
* Maximum Voltage is based on Ohm's Law [$V=\sqrt{P \times R}$] 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

B 8 J 5 R 0 E

Series

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

See web-site for custom core info	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 = 0.500 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	Ohmic value	Part No.		5.25	8	12	20	
	Prefix	Suffix						Prefix	Suffix						Prefix	Suffix						Prefix	Suffix						Prefix	Suffix					Prefix
0.5	R	50E					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							
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					These values involve very fine resistance wire and should not be used in critical applications without burn-in and/or thermal cycling:						
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	✓	✓	✓	✓								