

BR Series

High Power Metal Clad Braking Resistors



- Wirewound Technology
- Power ratings from 60 to 500 watts
- Resistance range of 0.1Ω to 1KΩ
- Non-inductive winding available
- Tolerances of 1%, 5%, or 10%
- Compact Packaging

BR / BRT SPECIFICATIONS

Type	Power Rating (watts)*		Resistance Range (Ω)	
	Heatsink	Free Air	Standard ⁽¹⁾	Non-inductive ⁽¹⁾
BR60 / BRT60	60	50	0.1 - 1K	10 - 100
BR80 / BRT80	80	64	0.1 - 1K	10 - 100
BR100 / BRT100	100	80	0.1 - 1K	10 - 100
BR120 / BRT120	120	96	0.1 - 1K	10 - 100
BR150 / BRT150	150	120	0.1 - 1K	10 - 100
BR200 / BRT200	200	140	0.1 - 1K	10 - 100
BR300 / BRT300	300	210	0.1 - 1K	10 - 100
BR400 / BRT400	400	240	0.1 - 1K	10 - 100
BR500 / BRT500	500	300	0.1 - 1K	10 - 100

*Power rating note: Stated power rating is dependent on the resistor being mounted to a panel or heatsink of adequate mass to prevent the resistor surface from exceeding 250°C. See temperature rise and derating curves for more information.

Environmental Specifications BR / BRT

Operating Temperature Range	-55°C to 200°C
TCR	< ±260ppm maximum
Dielectric Withstanding Voltage	2500 VAC
Insulation Resistance	20MΩ minimum
Short Time Overload	±2%+0.05Ω - 10 times rated power for 5 seconds
Moisture Resistance	±3%+0.05Ω 40°C, 95% RH, 100Vdc case to terminal, 500 hours
Load Life	±5%+0.05Ω 90 minutes rated power, 30 minutes off, 500 hours
Thermal Shock	±2%+0.05Ω 30 minutes rated power, 15 minutes -25°C
Vibration	±1%+0.05Ω 10Hz - 55Hz - 10Hz (1 minute) 2 hours each direction
Moisture Load Life	±3%+0.05Ω 40°C, 95% RH, 90 minutes 10% rated power, 30 minutes off 500 hours
Terminals	Standard: 0.25 inch (6.35mm) fast-on, 0.032 (0.8mm) thick Optional: M4 tap or flying lead terminations (contact factory)

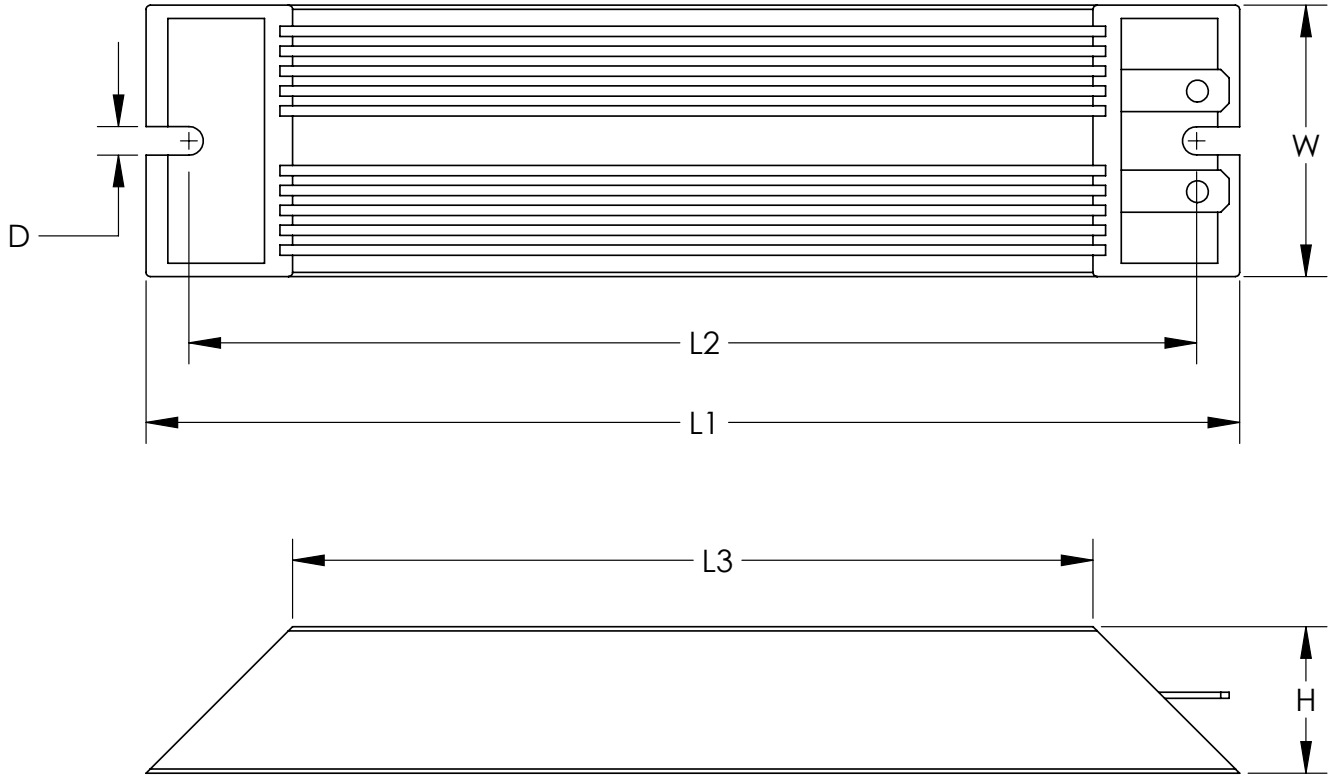
Ordering Information

Part Description: Part Type - Resistance - Tolerance

(1) Example: BRT200 10 OHM 5% (standard) or BRTN200 10 OHM 5% (non-inductive)

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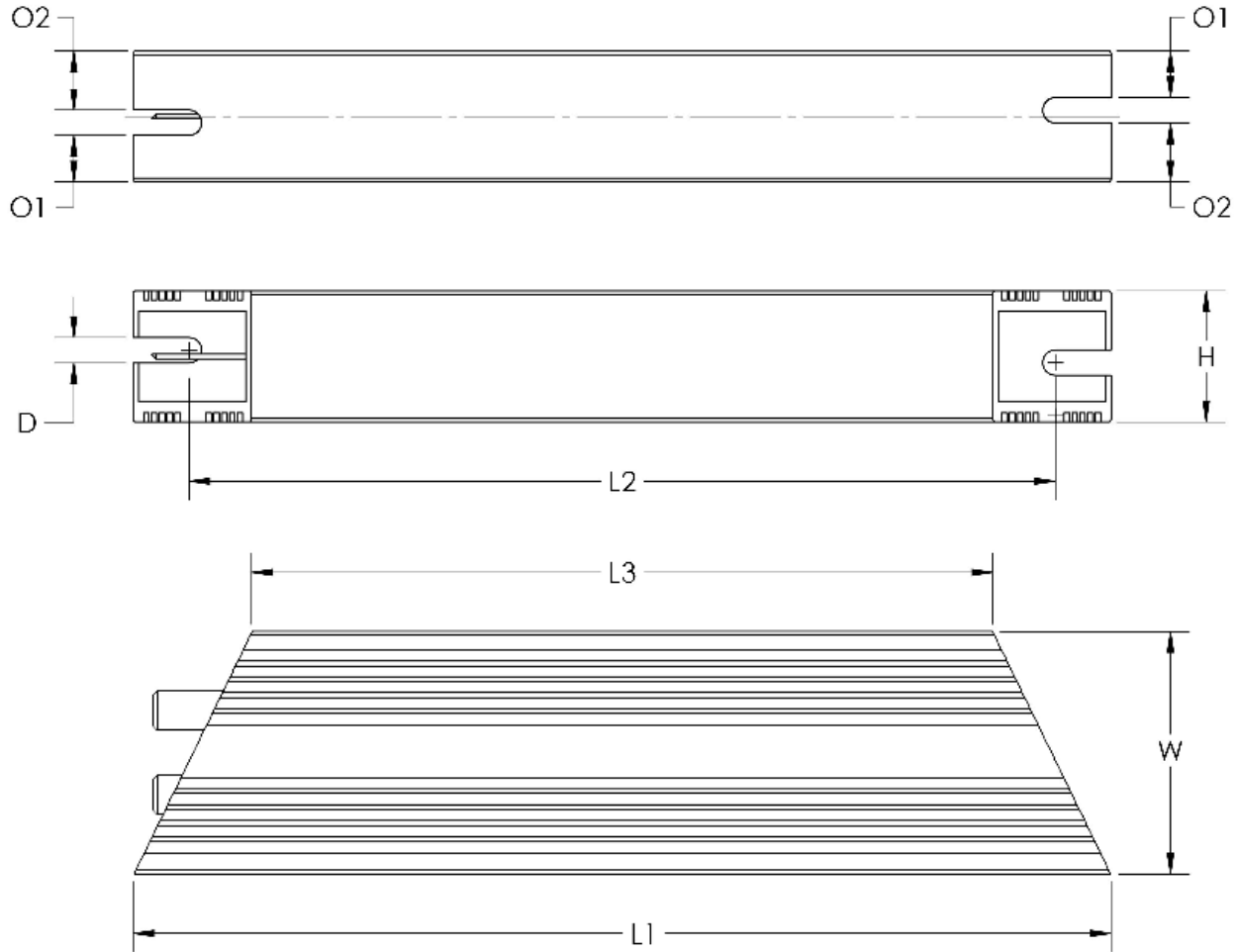
Terminals = 0.25 inch (6.35mm) fast-on

BR (flat) Dimensions - Inches (mm)

Type	L1 ± 0.78 (2.0)	L2 ± 0.78 (2.0)	L3 ± 0.78 (2.0)	W ±0.020 (0.5)	H ±0.020 (0.5)	D ±0.020 (0.5)
BR60	3.94 (100)	3.43 (87)	2.36 (60)	1.61 (41)	0.87 (22)	0.17 (4.3)
BR80	5.91 (150)	5.39 (137)	4.33 (110)	1.61 (41)	0.87 (22)	0.17 (4.3)
BR100	6.49 (165)	5.98 (152)	4.92 (125)	1.61 (41)	0.87 (22)	0.17 (4.3)
BR120	7.17 (182)	6.65 (169)	5.59 (142)	1.61 (41)	0.87 (22)	0.17 (4.3)
BR150	8.27 (210)	7.76 (197)	6.69 (170)	1.61 (41)	0.87 (22)	0.17 (4.3)
BR200	6.49 (165)	5.75 (146)	4.92 (125)	2.36 (60)	1.18 (30)	0.21 (5.3)
BR300	8.46 (215)	7.72 (196)	6.89 (175)	2.36 (60)	1.18 (30)	0.21 (5.3)
BR400	10.43 (265)	9.69 (246)	8.86 (225)	2.36 (60)	1.18 (30)	0.21 (5.3)
BR500	13.19 (335)	12.44 (316)	11.62 (295)	2.36 (60)	1.18 (30)	0.21 (5.3)

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Terminals = 0.25 inch (6.35mm) fast-on

BRT (tall) Dimensions

Type	Dimensions - Inches (mm)							
	L1 ± 0.78 (2.0)	L2 ± 0.78 (2.0)	L3 ± 0.78 (2.0)	W ±0.020 (0.5)	H ±0.020 (0.5)	D ±0.020 (0.5)	O1 ±0.020 (0.5)	O2 ±0.020 (0.5)
BRT60	3.94 (100)	3.43 (87)	2.36 (60)	1.61 (41)	0.87 (22)	0.17 (4.3)	0.31 (7.8)	0.39 (10.0)
BRT80	5.91(150)	5.39 (137)	4.33 (110)	1.61 (41)	0.87 (22)	0.17 (4.3)	0.31 (7.8)	0.39 (10.0)
BRT100	6.49 (165)	5.98 (152)	4.92 (125)	1.61 (41)	0.87 (22)	0.17 (4.3)	0.31 (7.8)	0.39 (10.0)
BRT120	7.17 (182)	6.65 (169)	5.59 (142)	1.61 (41)	0.87 (22)	0.17 (4.3)	0.31 (7.8)	0.39 (10.0)
BRT150	8.27 (210)	7.76 (197)	6.69 (170)	1.61 (41)	0.87 (22)	0.17 (4.3)	0.31 (7.8)	0.39 (10.0)
BRT200	6.49 (165)	5.75 (146)	4.92 (125)	2.36 (60)	1.18 (30)	0.21 (5.3)	0.41 (10.4)	0.57 (14.6)
BRT300	8.46 (215)	7.72 (196)	6.89 (175)	2.36 (60)	1.18 (30)	0.21 (5.3)	0.41 (10.4)	0.57 (14.6)
BRT400	10.43 (265)	9.69 (246)	8.86 (225)	2.36 (60)	1.18 (30)	0.21 (5.3)	0.41 (10.4)	0.57 (14.6)
BRT500	13.19 (335)	12.44 (316)	11.62 (295)	2.36 (60)	1.18 (30)	0.21 (5.3)	0.41 (10.4)	0.57 (14.6)

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BR / BRT Power Derating and Temperature Rise

