



Features

- Formerly a Riedon™ product
- Wirewound technology
- Power ratings from 60 to 500 watts
- Resistance range of 0.1 to 1K Ω
- Non-inductive winding available
- Tolerances of 1 %, 5 %, or 10 %
- Compact packaging
- RoHS compliant*

Applications

- Renewable energy
- Power converters
- Motor drives

BR / BRT Series – Riedon™ High Power Metal Clad Braking Resistors by Bourns

Electrical Characteristics

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

Note:

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

Environmental Specifications

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

Additional Information

Click these links for more information:



How To Order

BRT 200 - 10R J 1

Model _____
 BR (flat)
 BRT (tall)

Heat Sink Power Rating _____
 60 = 60 W
 80 = 80 W
 100 = 100 W
 120 = 120 W
 150 = 150 W
 200 = 200 W
 300 = 300 W
 400 = 400 W
 500 = 500 W

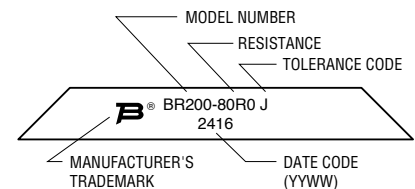
Resistance _____
 0.1 - 1K Ω (standard)
 10 - 100 Ω (non-inductive)

Tolerance _____
 F = ± 1 %
 J = ± 5 %
 K = ± 10 %

Internal Code _____
 0 to 9

Typical Part Marking

Represents total content. Layout may vary.



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

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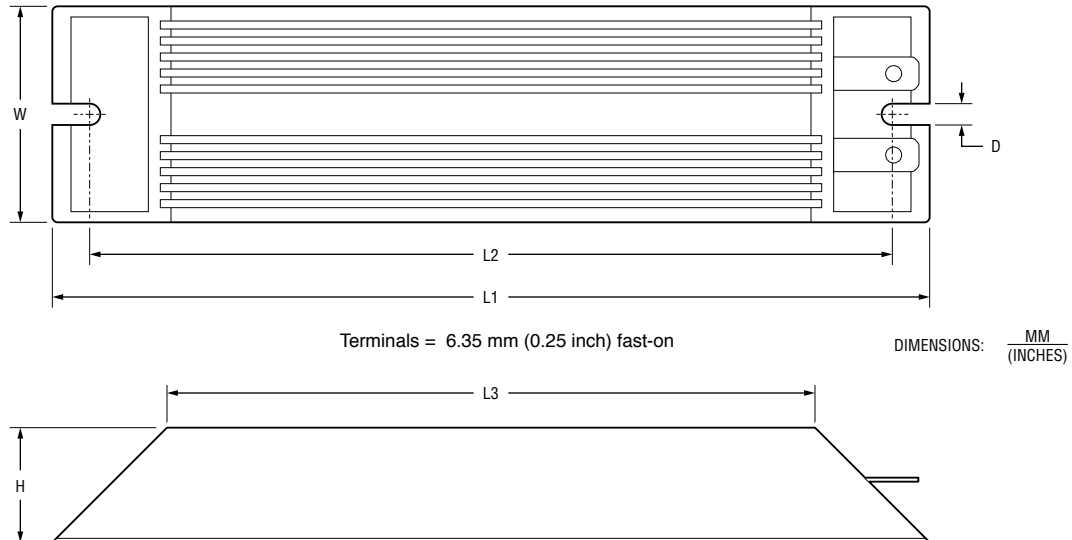
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BR/BRT Series – Riedon™ High Power Metal Clad Braking Resistors by Bourns

BOURNS®

Product Dimensions

BR (flat) Series



Model	L1 ± 2.0 (0.78)	L2 ± 2.0 (0.78)	L3 ± 2.0 (0.78)	W ± 0.5 (0.020)	H ± 0.5 (0.020)	D ± 0.5 (0.020)	Mass/Weight (g)
BR60	100 (3.94)	87 (3.43)	60 (2.36)	41 (1.61)	22 (0.87)	4.3 (0.17)	125
BR80	150 (5.91)	137 (5.39)	110 (4.33)				200
BR100	165 (6.49)	152 (5.98)	125 (4.92)				240
BR120	182 (7.17)	169 (6.65)	142 (5.59)				270
BR150	210 (8.27)	197 (7.76)	170 (6.69)				340
BR200	165 (6.49)	146 (5.75)	125 (4.92)	60 (2.36)	30 (1.18)	5.3 0.21	450
BR300	215 (8.46)	196 (7.72)	175 (6.89)				610
BR400	265 (10.43)	246 (9.69)	225 (8.86)				870
BR500	335 (13.19)	316 (12.44)	295 (11.62)				950

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Users should verify actual device performance in their specific applications.

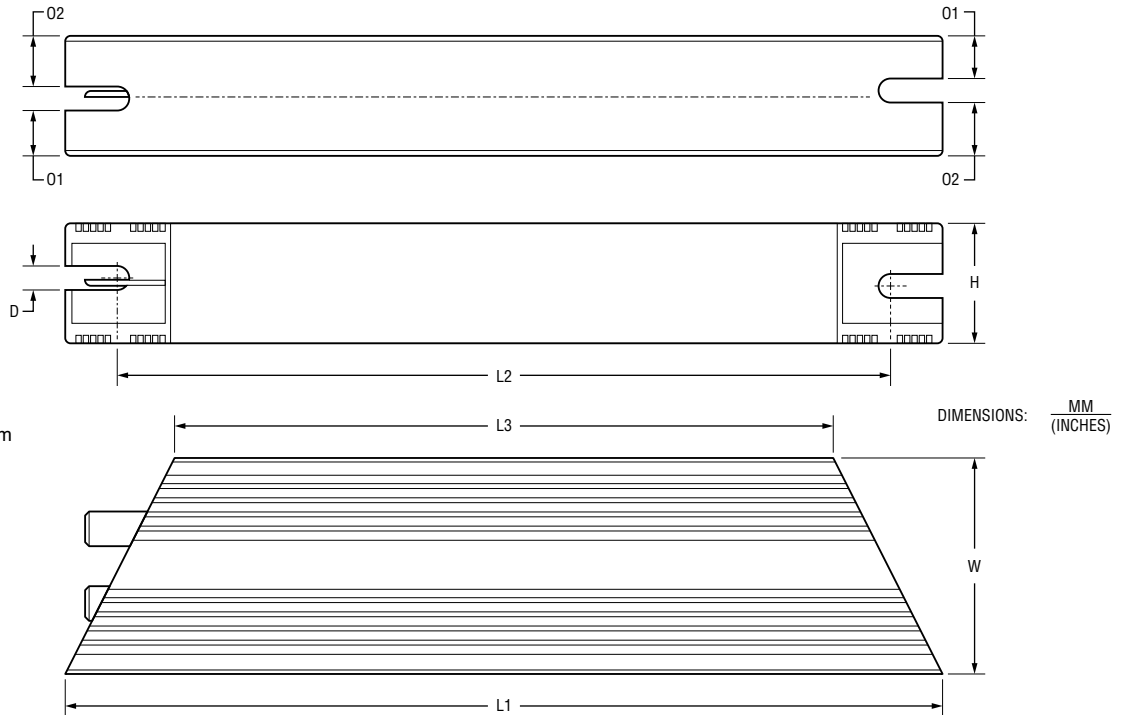
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BR/BRT Series – Riedon™ High Power Metal Clad Braking Resistors by Bourns

BOURNS®

Product Dimensions

BRT (tall) Series



Model	L1 ± 2.0 (0.78)	L2 ± 2.0 (0.78)	L3 ± 2.0 (0.78)	W ± 0.5 (0.020)	H ± 0.5 (0.020)	D ± 0.5 (0.020)	O1 ± 0.5 (0.020)	O2 ± 0.5 (0.020)	Mass/Weight (g)
BRT60	100 (3.94)	87 (3.43)	60 (2.36)	41 (1.61)	22 (0.87)	4.3 (0.17)	7.8 (0.31)	10.0 (0.39)	125
BRT80	150 (5.91)	137 (5.39)	110 (4.33)						200
BRT100	165 (6.49)	152 (5.98)	125 (4.92)						240
BRT120	182 (7.17)	169 (6.65)	142 (5.59)						270
BRT150	210 (8.27)	197 (7.76)	170 (6.69)						340
BRT200	165 (6.49)	146 (5.75)	125 (4.92)	60 (2.36)	30 (1.18)	5.3 0.21	10.4 (0.41)	14.6 (0.57)	450
BRT300	215 (8.46)	196 (7.72)	175 (6.89)						610
BRT400	265 (10.43)	246 (9.69)	225 (8.86)						870
BRT500	335 (13.19)	316 (12.44)	295 (11.62)						950

Specifications are subject to change without notice.

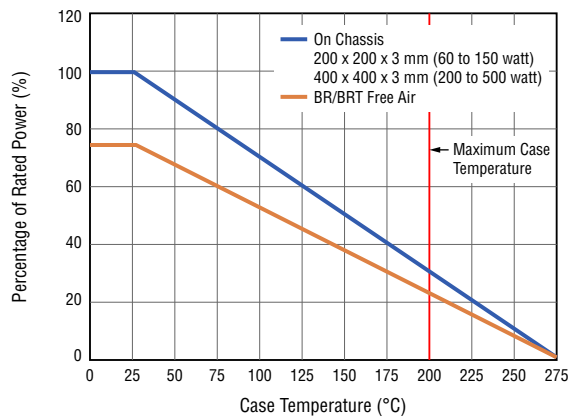
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BR/BRT Series – Riedon™ High Power Metal Clad Braking Resistors by Bourns

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Power Derating



Packaging Specifications

Bulk..... 10 pcs. per box

BOURNS®

Americas: Tel: +1 951-781-5500 • Email: americus@bourns.com

Mexico: Tel: +52-614-478-0400 • Email: mexicus@bourns.com

Asia: Tel: +886-2-2562-4117 • Email: asiacus@bourns.com

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