



Features

- Designed to meet IEC 60269-4 (aR class) fuse standard
- 800/1000 VDC rated voltage and 50 kA interrupting current
- RoHS compliant*
- Halogen free**

Applications

- Power conversion devices
- DC common bus systems
- Battery energy storage systems (BESS)
- DC charging piles

Sustainability

- Eco-logistics-friendly packing
- Energy-saving low-power design
- ISO 14001, low-impact energy

Product Overview



Bourns® PF-01N100E Series POWrFuse™ High-Power Fuses feature high-power industrial fuse links designed to meet semiconductor (aR class) protection standards to protect semiconductors against overcurrent conditions.

The PF-01N100E Series provides dependable aR class protection for 800/1000 VDC applications, delivering fast fault response, high interrupting performance, and IEC 60269-4 compliance for today's energy storage and power electronics designs.

Electrical Characteristics

Model***	Rated Current (A)	Rated Voltage	Interrupting Rating	I ² t (A ² s)		Power Loss**** (W)	Agency Recognition
				Pre-arcing	Clearing		
PF-01N100E50xx	50	1000 VDC	50 kA @ 1000 VDC	350	1650	14	 B 118437  N8A 118437
PF-01N100E63xx	63			968	4550	15	
PF-01N100E80xx	80			1400	6549	24	
PF-01N100E100xx	100			1900	8900	25	
PF-01N100E125xx	125			3850	18200	32	
PF-01N100E160xx	160			5550	26200	40	
PF-01N100E200xx	200			9900	46600	52	
PF-01N100E250xx	250			15400	72800	70	
PF-01N100E315xx	315			31100	146400	80	
PF-01N100E350xx	350			41500	195000	90	
PF-01N100E400xx	400	800 VDC	50 kA @ 1000 VDC	56000	265000	95	
PF-01N80E450xx	450			75500	295000	100	

*** xx = Mounting Type: B1 = Bolt Down (Type 1); B2 = Bolt Down (Type 2); DB = DIN Blade; FE = Flush End

**** Tested at rated current

Environmental Characteristics

Specification	Value
Operating Temperature	-40 °C to +85 °C

Contact Information

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The Americas	+1-951 781-5500	americus@bourns.com

How to Order

POWrFuse™ Product Designator **PF - 01N 100E 250 FE**

Size _____
01N = NH01

Rated Voltage _____
100E = 1000 VDC 80E = 800 VDC

Rated Current _____
250 = 250 A

Mounting Type _____
B1 = Bolt Down (Type 1) DB = DIN Blade
B2 = Bolt Down (Type 2) FE = Flush End

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

** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice.

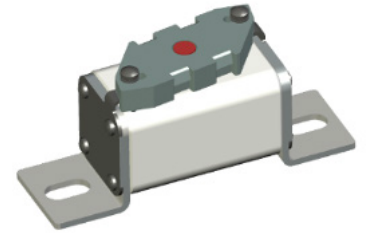
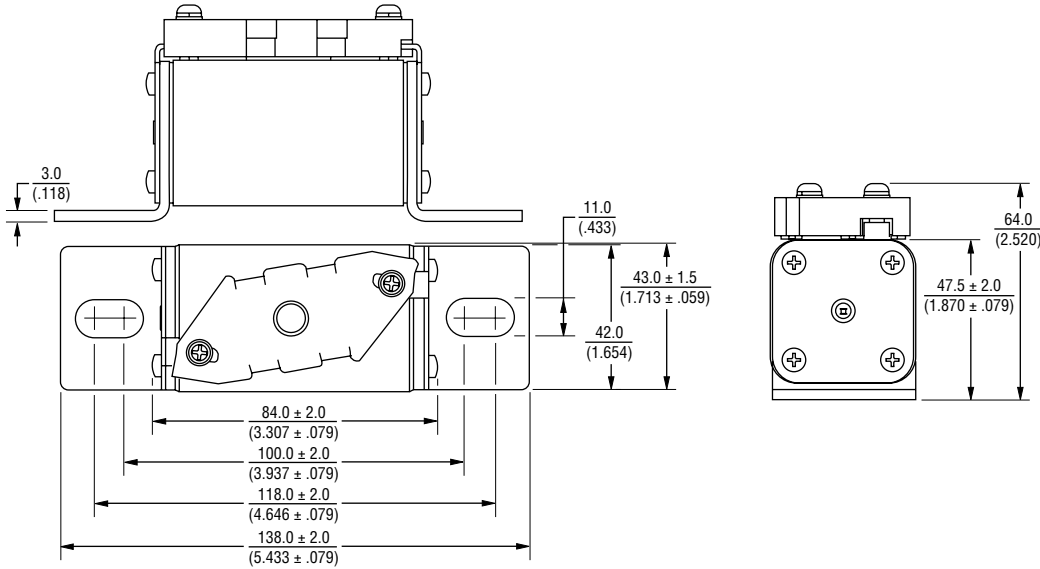
Users should verify actual device performance in their specific applications.

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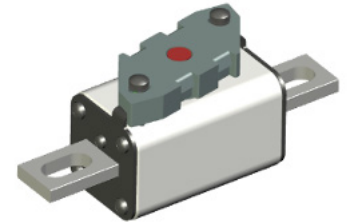
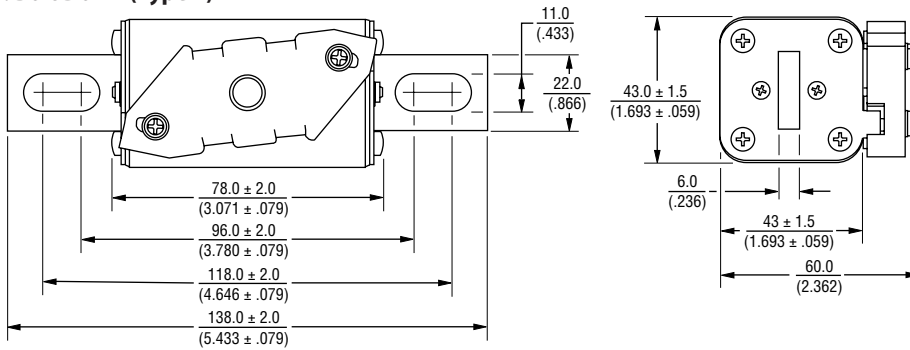


Product Dimensions

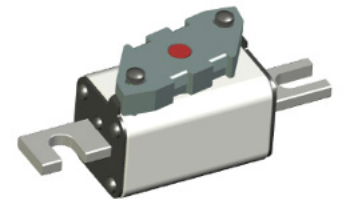
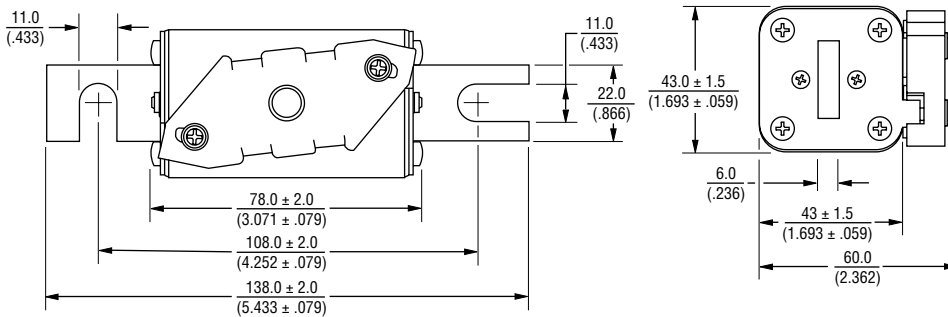
B1: Bolt Down (Type 1)



B2: Bolt Down (Type 2)



DB: DIN Blade



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Product Dimensions continued on next page

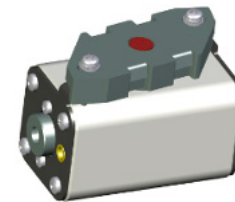
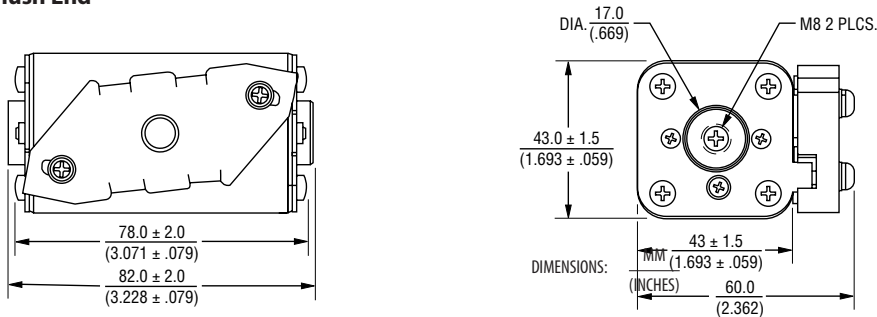
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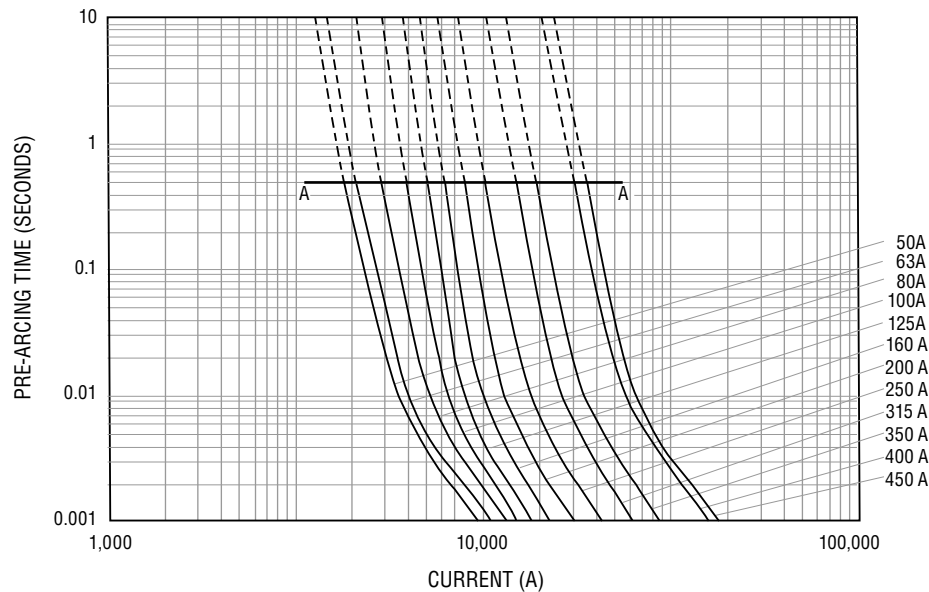


Product Dimensions (Continued)

FE: Flush End

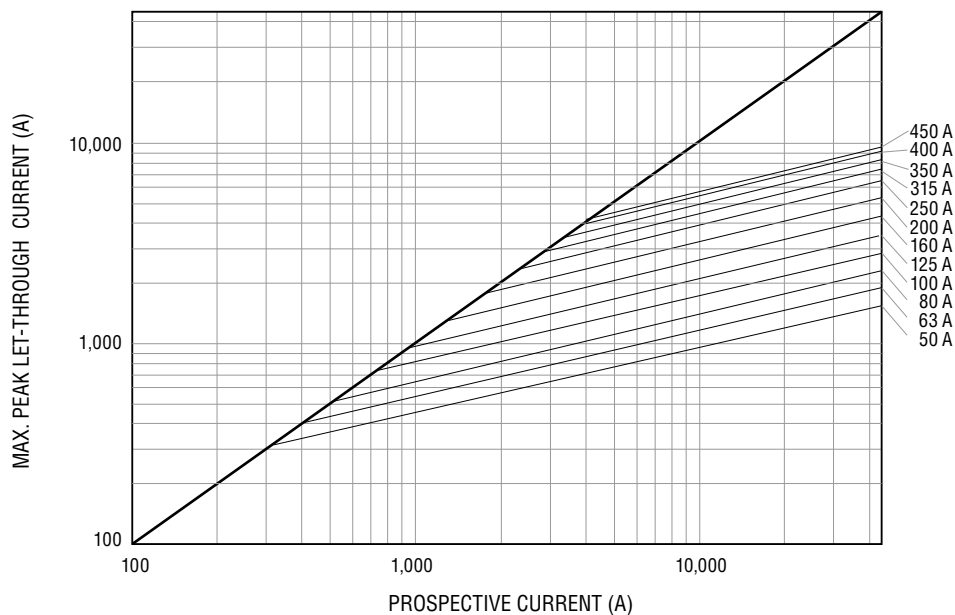


Average Pre-Arcing Time vs. Current Curves

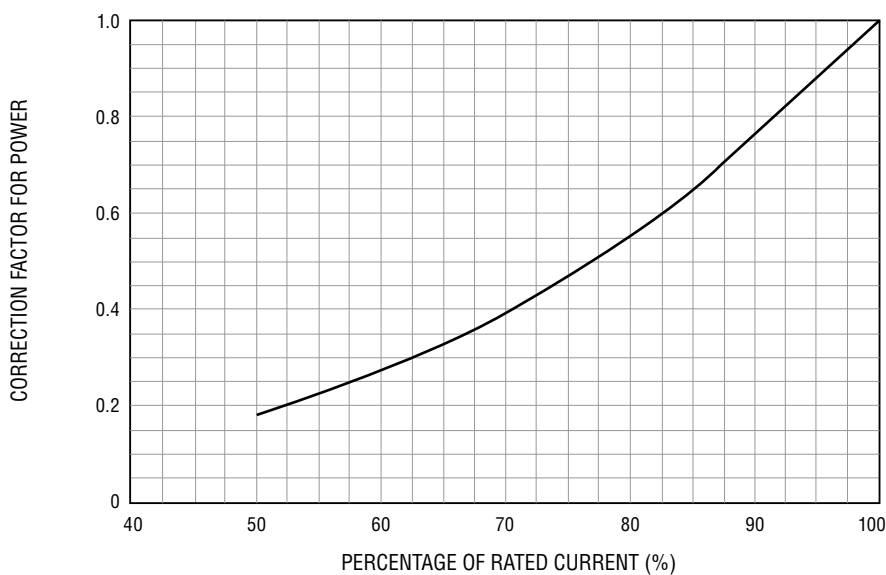




Truncated Current Curve (For Reference Only)



Power Dissipation Curve (For Reference Only)

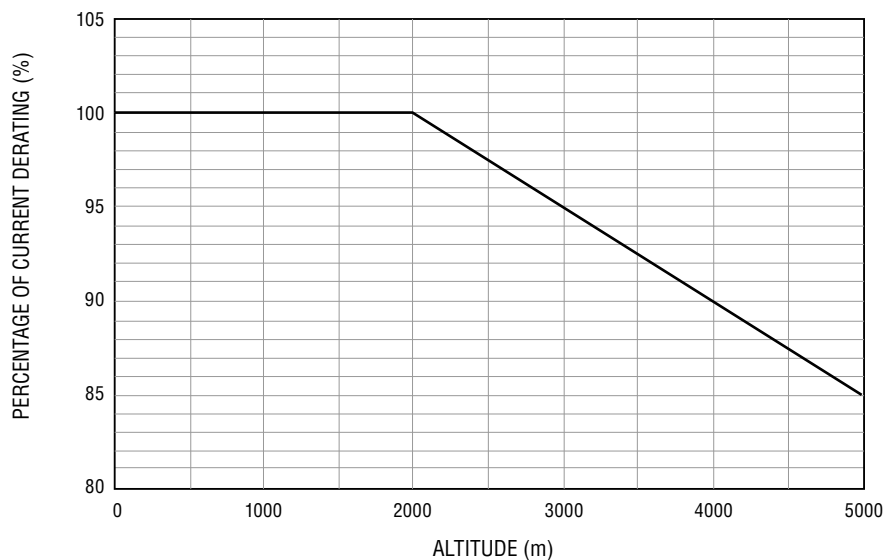


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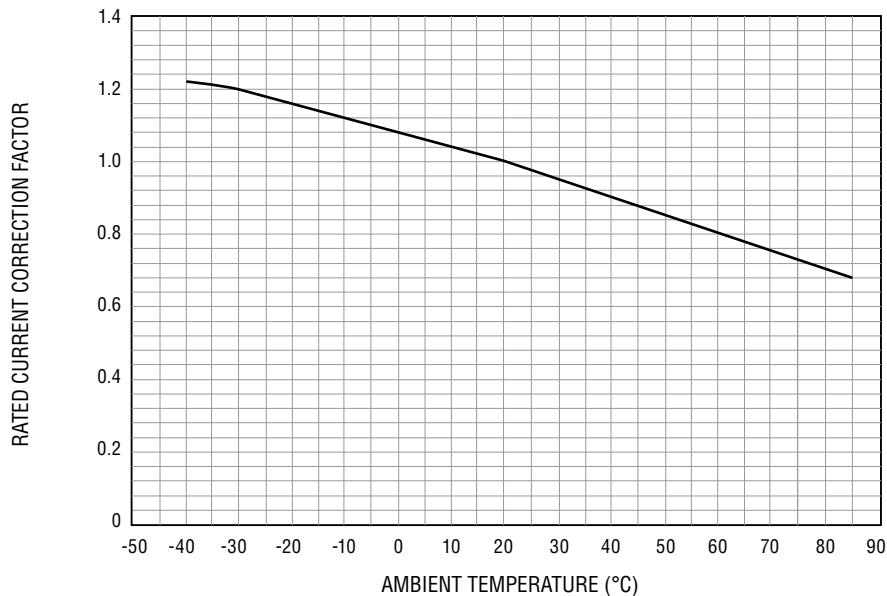
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Altitude Curve (For Reference Only)



Current Rating Thermal Derating Curve



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PF-01N100E SERIES

Energy Storage (aR Class) Power Fuses



*RoHS COMPLIANT
**HALOGEN FREE

Typical Part Marking

Current Rating (A)	Note 1	Note 2	Note 3	Note 4
50	50	DC Resistance	Date Code	Mounting Type (B1/B2/DB/FE)
63	63			
80	80			
100	100			
125	125			
160	160			
200	200			
250	250			
315	315			
350	350			
400	400			
450	450			

Marking

BOURNS®
PF-01N100E (Note 1) (Note 4)
 (Note 1) **A**
1000 VDC
I₁: 50 kA
aR 
 (Note 2) **mΩ (20 °C)**
 (Note 3) **3625100231**

Packaging Specifications

Model	Pearl Cotton Pallet	Carton
PF-01N100E	8 Pieces	32 Pieces

Recommended Mounting Torque and Bolt Sizes

Mounting Type	Mounting Torque	Bolt Size
B1 / B2 / DB	21 ± 1 Nm	M10
FE	13~20 Nm	M8

REV. 05/26

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