

POWrFuse™ PF-F Series Features

- Designed to UL 248-13 semiconductor class aR fuse standard
- 800 VAC/VDC rated voltage
- Designed in the traditional round body bolted style package
- RoHS compliant* and halogen free**
- Agency recognition: c **71** us



PF-F Series - Semiconductor (aR) Power Fuses

Electrical Characteristics

Model	Rated Current (A)	Rated Voltage	Interrupting Rating	Clearing at 800 V I ² t (A ² s)	Power Loss (W)	Agency Recognition
PF-FB1-50	50			800	11	
PF-FB2-50	30			000		
PF-FB1-75	75			1500	15.5	
PF-FB2-75	73			1300		
PF-FB1-100	100			3100	24	
PF-FB2-100	100					
PF-FB1-125	125	105		10000	28	
PF-FB2-125	125		100 kA @ 800 VAC 50 kA @ 800 VDC	10000	20	<u>E500949</u>
PF-FB1-150	150			16900	32	
PF-FB2-150	130					
PF-FB1-160	160	800 VAC 800 VDC		17100	33	
PF-FB2-160	100					
PF-FB1-175	175			17500	35	
PF-FB2-175						
PF-FB1-200	200			22000	40.5	
PF-FB2-200	200					
PF-FB1-225	225			30000	43	
PF-FB2-225						
PF-FB1-250	250			37000	46	
PF-FB2-250						
PF-FB1-300	300	350		52000	56	
PF-FB2-300						
PF-FB1-350	350			81000	65	
PF-FB2-350	330					
PF-FB1-400	400			110000	77	
PF-FB2-400	400			110000		

Minimum breaking capacity: 800 % In @ 800 VAC/VDC

BOURNS®

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

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

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

www.bourns.com

Additional Information

Click these links for more information:











PRODUCT TECHNICAL INVENTORY SAMPLES CONTACT

^{**} 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. "POWrFuse" is a trademark of Bourns, Inc.



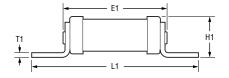


RoHS Directive 2015/863, Mar 31, 2015 and Annex.

PF-F Series – Semiconductor (aR) Power Fuses

Product Dimensions (Bolt Mounting)

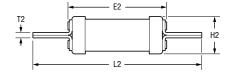
B1 Type



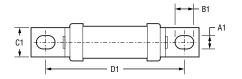




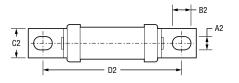
B2 Type











B1 Type	A1	B1	C1	D1	E1	Н1	L1	T1	W1
50 A ~ 150 A	$\frac{8.8 \pm 1.0}{(.346 \pm .039)}$	$\frac{12.4 \pm 1.0}{(.488 \pm .039)}$	$\frac{19.1 \pm 1.0}{(.752 \pm .039)}$	$\frac{91.6 \pm 3.6}{(3.606 \pm .142)}$	$\frac{69.0 \pm 3.0}{(2.717 \pm .118)}$	$\frac{27.1 \pm 2.0}{(1.067 \pm .079)}$	$\frac{111.6 \pm 3.0}{(4.394 \pm .118)}$	$\frac{3.0 \pm 0.2}{(.118 \pm .008)}$	$\frac{24.1 \pm 2.0}{(.949 \pm .079)}$
160 A ~ 400 A	$\frac{10.5 \pm 1.0}{(.413 \pm .039)}$	$\frac{15.0 \pm 1.0}{(.591 \pm .039)}$	$\frac{26.0 \pm 1.0}{(1.024 \pm .039)}$	$\frac{95.0 \pm 4.5}{(3.740 \pm .177)}$	$\frac{69.2 \pm 3.0}{(2.744 \pm .118)}$	$\frac{38.2 \pm 2.0}{(1.504 \pm .079)}$	$\frac{117.6 \pm 3.0}{(4.630 \pm .118)}$	$\frac{3.0 \pm 0.2}{(.118 \pm .008)}$	$\frac{35.2 \pm 2.0}{(1.386 \pm .079)}$

B2 Type	A2	B2	C2	D2	E2	H2	L2	T2	W2
50 A ~ 150 A	$\frac{8.8 \pm 1.0}{(.346 \pm .039)}$	$\frac{12.4 \pm 1.0}{(.488 \pm .039)}$	$\frac{19.1 \pm 1.0}{(.752 \pm .039)}$	$\frac{91.6 \pm 3.6}{(3.606 \pm .142)}$	$\frac{66.0 \pm 3.0}{(2.598 \pm .118)}$	$\frac{24.1 \pm 2.0}{(.949 \pm .079)}$	$\frac{111.6 \pm 3.0}{(4.394 \pm .118)}$	$\frac{3.4 \pm 0.2}{(.134 \pm .008)}$	$\frac{24.1 \pm 2.0}{(.949 \pm .079)}$
160 A ~ 400 A	$\frac{10.5 \pm 1.0}{(.413 \pm .039)}$	$\frac{15.0 \pm 1.0}{(.591 \pm .039)}$	$\frac{26.0 \pm 1.0}{(1.024 \pm .039)}$	$\frac{95.0 \pm 4.5}{(3.740 \pm .177)}$	$\frac{69.2 \pm 3.0}{(2.744 \pm .118)}$	$\frac{35.2 \pm 2.0}{(1.386 \pm .079)}$	$\frac{117.6 \pm 3.0}{(4.630 \pm .118)}$	$\frac{6.0 \pm 0.2}{(.236 \pm .008)}$	$\frac{35.2 \pm 2.0}{(1.386 \pm .079)}$

Environmental Characteristics

Current Rating Thermal Derating Curve

Operating Temperature.....-55 °C to +125 °C

140 DERATING PERCENTAGE (%) 120 100 80 60 25 °C 40 20 0

AMBIENT TEMPERATURE (°C)

How to Order

PF - F B1 - 100 POWrFuse™ -**Product Designator** Series Name Mounting Type B1 = Bolt Mounting, Type 1 B2 = Bolt Mounting, Type 2 Rated Current -50 - 400 = 50 A - 400 A

Packaging

Model	Quantity		
PF-F (50 A - 150 A)	20 pcs. / box		
PF-F (160 A - 400 A)	10 pcs. / box		

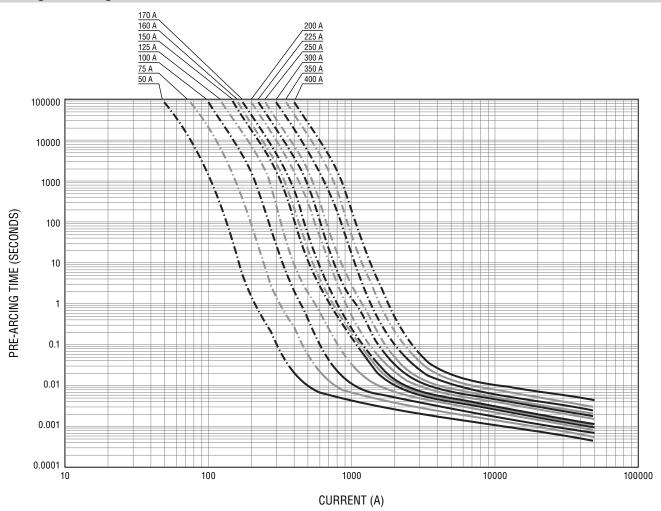
-20

-40

-60

100 120

Average Pre-Arcing Time vs. Current Curves



PF-F Series - Semiconductor (aR) Power Fuses

BOURNS®

Model Note **Ink Color** Marking PF-FB1-50 50 PF-FB1-75 75 PF-FB1-100 100 PF-FB1-125 125 BOURNS' PF-FB1-150 150 PF-FB1 (Note) A PF-FB1-160 160 100kA 800V AC 50kA 800V DC PF-FB1-175 175 Black PF-FB1-200 200 → aR PF-FB1-225 225 c**AL**us PF-FB1-250 250 PF-FB1-300 300 PF-FB1-350 350 PF-FB1-400 400 PF-FB2-50 50 PF-FB2-75 75 PF-FB2-100 100 PF-FB2-125 125 **BOURNS** PF-FB2-150 150 PF-FB2 (Note) A PF-FB2-160 160 100kA 800V AC 50kA 800V DC PF-FB2-175 175 Black

 \Longrightarrow aR

c**FL** us

Typical Part Marking

Recommended Mounting Torque and Bolt Sizes

Mounting Torque	Bolt Size			
12 ± 1 Nm	M8			

PF-FB2-200

PF-FB2-225

PF-FB2-250

PF-FB2-300

PF-FB2-350

PF-FB2-400

200

225

250

300

350

400

Legal Disclaimer Notice



This legal disclaimer applies to purchasers and users of Bourns® products manufactured by or on behalf of Bourns, Inc. and its affiliates (collectively, "Bourns").

Unless otherwise expressly indicated in writing, Bourns® products and data sheets relating thereto are subject to change without notice. Users should check for and obtain the latest relevant information and verify that such information is current and complete before placing orders for Bourns® products.

The characteristics and parameters of a Bourns® product set forth in its data sheet are based on laboratory conditions, and statements regarding the suitability of products for certain types of applications are based on Bourns' knowledge of typical requirements in generic applications. The characteristics and parameters of a Bourns® product in a user application may vary from the data sheet characteristics and parameters due to (i) the combination of the Bourns® product with other components in the user's application, or (ii) the environment of the user application itself. The characteristics and parameters of a Bourns® product also can and do vary in different applications and actual performance may vary over time. Users should always verify the actual performance of the Bourns® product in their specific devices and applications, and make their own independent judgments regarding the amount of additional test margin to design into their device or application to compensate for differences between laboratory and real world conditions.

Unless Bourns has explicitly designated an individual Bourns® product as meeting the requirements of a particular industry standard (e.g., ISO/TS 16949) or a particular qualification (e.g., UL listed or recognized), Bourns is not responsible for any failure of an individual Bourns® product to meet the requirements of such industry standard or particular qualification. Users of Bourns® products are responsible for ensuring compliance with safety-related requirements and standards applicable to their devices or applications.

Bourns® products are not recommended, authorized or intended for use in nuclear, lifesaving, life-critical or life-sustaining applications, nor in any other applications where failure or malfunction may result in personal injury, death, or severe property or environmental damage. Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any Bourns® products in such unauthorized applications might not be safe and thus is at the user's sole risk. Life-critical applications include devices identified by the U.S. Food and Drug Administration as Class III devices and generally equivalent classifications outside of the United States.

Bourns expressly identifies those Bourns® standard products that are suitable for use in automotive applications on such products' data sheets in the section entitled "Applications." Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any other Bourns® standard products in an automotive application might not be safe and thus is not recommended, authorized or intended and is at the user's sole risk. If Bourns expressly identifies a sub-category of automotive application in the data sheet for its standard products (such as infotainment or lighting), such identification means that Bourns has reviewed its standard product and has determined that if such Bourns® standard product is considered for potential use in automotive applications, it should only be used in such sub-category of automotive applications. Any reference to Bourns® standard product in the data sheet as compliant with the AEC-Q standard or "automotive grade" does not by itself mean that Bourns has approved such product for use in an automotive application.

Bourns® standard products are not tested to comply with United States Federal Aviation Administration standards generally or any other generally equivalent governmental organization standard applicable to products designed or manufactured for use in aircraft or space applications. Bourns expressly identifies Bourns® standard products that are suitable for use in aircraft or space applications on such products' data sheets in the section entitled "Applications." Unless expressly and specifically approved in writing by two authorized Bourns representatives on a case-by-case basis, use of any other Bourns® standard product in an aircraft or space application might not be safe and thus is not recommended, authorized or intended and is at the user's sole risk.

The use and level of testing applicable to Bourns® custom products shall be negotiated on a case-by-case basis by Bourns and the user for which such Bourns® custom products are specially designed. Absent a written agreement between Bourns and the user regarding the use and level of such testing, the above provisions applicable to Bourns® standard products shall also apply to such Bourns® custom products.

Users shall not sell, transfer, export or re-export any Bourns® products or technology for use in activities which involve the design, development, production, use or stockpiling of nuclear, chemical or biological weapons or missiles, nor shall they use Bourns® products or technology in any facility which engages in activities relating to such devices. The foregoing restrictions apply to all uses and applications that violate national or international prohibitions, including embargos or international regulations. Further, Bourns® products and Bourns technology and technical data may not under any circumstance be exported or re-exported to countries subject to international sanctions or embargoes. Bourns® products may not, without prior authorization from Bourns and/or the U.S. Government, be resold, transferred, or re-exported to any party not eligible to receive U.S. commodities, software, and technical data.

To the maximum extent permitted by applicable law, Bourns disclaims (i) any and all liability for special, punitive, consequential, incidental or indirect damages or lost revenues or lost profits, and (ii) any and all implied warranties, including implied warranties of fitness for particular purpose, non-infringement and merchantability.

For your convenience, copies of this Legal Disclaimer Notice with German, Spanish, Japanese, Traditional Chinese and Simplified Chinese bilingual versions are available at:

Web Page: http://www.bourns.com/legal/disclaimers-terms-and-policies

PDF: http://www.bourns.com/docs/Legal/disclaimer.pdf

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Specialty Fuses category:

Click to view products by Bourns manufacturer:

Other Similar products are found below:

63NZ02GL 80NH00GR-6 FWP-32A14F 12LCT ECF-1 ECF-2 ECF-3 ECF-4 170M3809D N-2-1/2 N-3-2/10 NITD2 16D27SB 16FC 170M1564D 170M4241 ESD63 ABS-30 ABS-8 FWP-25A14FI FWP-80A22FI 30CIF06 32CMLC 32NH00AM-6 TDC180-2 TPL-BL TPS-5 KLC40 WKL NITD25 04450080FX850 NITD16 LA60Q152 LA60Q402 ECF-5 TDC180-10 TDC180-7 TPM-25 3AG-312 16NHG000B 170M3509 DEO200 DD200M250 BP/S-6-1/4 170M3510 TPH-300 EFS200 170M0161 170M6016 BK/F02B-1/2A