BOURNS®

PF-SRC50E SERIES

Semiconductor (aR) Power Fuses

*RoHS COMPLIANT & **HALOGEN FREE

Features

- Designed to UL 248-13 and IEC 60269-4 semiconductor fuse standards
- 500 VDC/690 VAC and 32-100 A ratings available
- Up to 100 kA interrupting rating
- Compact size: 17.5 mm dia. x 46 mm L
- Bolt-down mounting type
- RoHS compliant* and halogen free**

Applications

- Energy Storage Systems
- Battery pack protection
- Battery Disconnect Unit (BDU)
- Battery module protection

Sustainability

- Small size reduces material use
- ISO 14001, low impact energy

Product Overview

BOURNS® POWrFUSE™

Bourns® PF-SRC50E Series POWrFuse™ High-Power Fuses feature high-power industrial fuse links designed to meet UL 248-13 and IEC 60269-4 (aR Class) semiconductor standards.

The PF-SRC50E Series is engineered to protect semiconductor devices against overcurrent conditions. Housed in a compact 17.5 mm diameter by 46 mm length, this bolt-down mounting series is ideal for use in power inverters, converters, rectifiers, AC/DC drives, uninterruptible power supplies (UPS) and reduced voltage motor starters.

Electrical Characteristics

Model	Rated Current (A)	Rated Voltage	Interrupting Rating	I^2t (A^2S)***		Max. Power Loss (W)****	Agency Recognition
				Pre-arcing	Cleaning		
PF-SRC50E32B1	32	500 VDC 690 VAC	50 kA @ 500 VDC 100 kA @ 690 VAC	44	320	7.6	c UL us E500949
PF-SRC50E40B1	40			53	400	10.0	
PF-SRC50E50B1	50			120	900	11.6	TÜV Rheinland Product Safety R 50705703
PF-SRC50E63B1	63			210	1600	12.5	
PF-SRC50E80B1	80			330	2400	18.2	CE AN 50705725
PF-SRC50E100B1	100			480	3500	26.7	

*** The value is measured at maximum breaking capacity (DC); the minimum breaking capacity = 500 % of rated current.
**** Measured at 100 % of rated current.

Environmental Characteristics

Operating Temperature Range..... -40 °C to +85 °C
Storage Conditions .....10~30 °C; 30~70 % RH

Contact Information

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How to Order

PF - SRC 50E 100 B1

- POWrFuse™ Product Designator
- Series Name
- Rated Voltage
  - 50E = 500 VDC
- Rated Current
  - 30 ~ 100 = 32 A ~ 100 A
- Mounting Type
  - B1 = Bolt-Down, Type 1

* 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.

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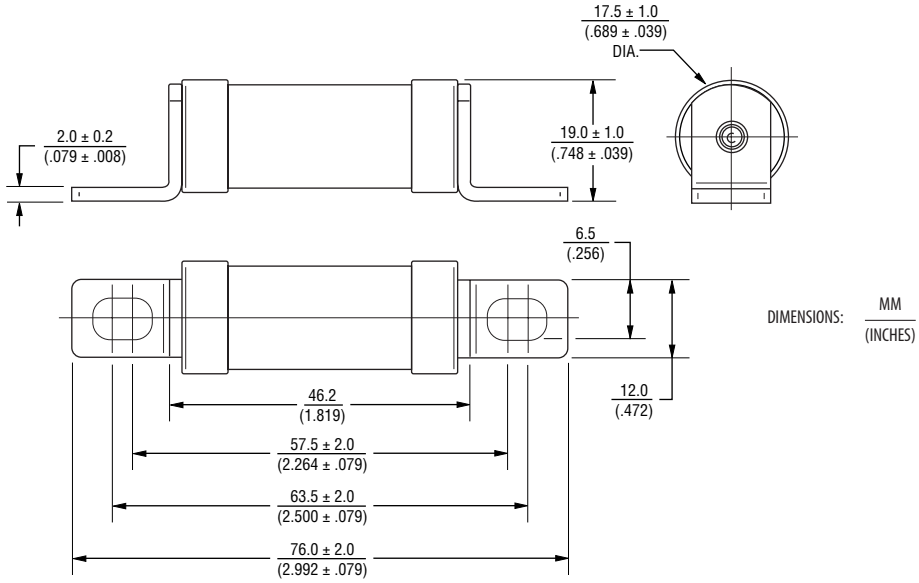
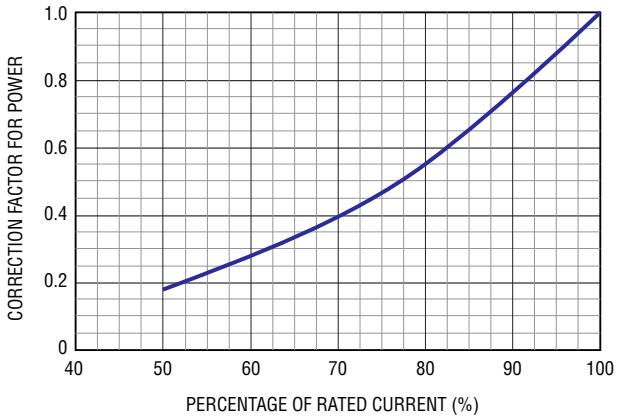
Product Dimensions

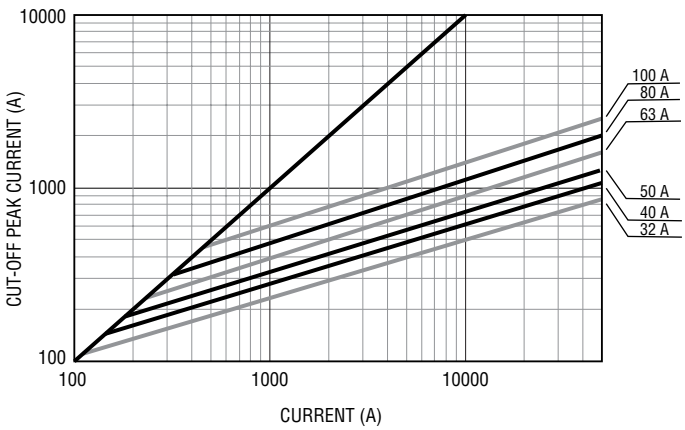
Bolt-down (B1 Type)



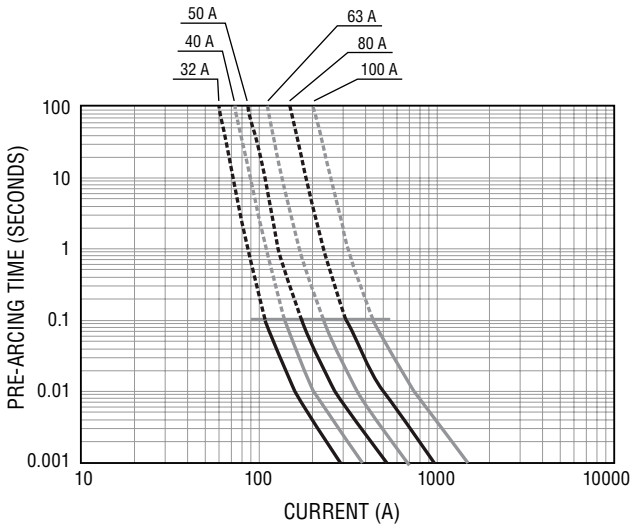
Power Dissipation Curve (for Reference Only)



Cut-off Current Characteristic Curves (for Reference Only)



Average Pre-Arcing Time vs. Current Curves (for Reference Only)



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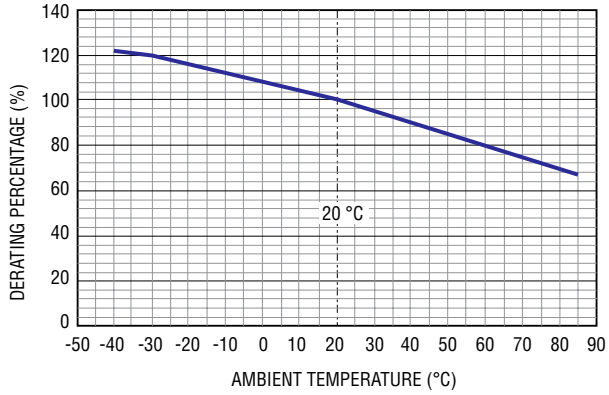
Current Rating Thermal Derating Curve



Recommended Mounting Torque and Bolt Sizes

Mounting Torque	Bolt Size
6 ± 1 Nm	M6

Typical Part Marking

Current Rating (A)	Note	Ink Color	Marking
32	32	Black	BOURNS® PF-SRC50E Note A 690VAC 100kA 500VDC 50kA aR
40	40		
50	50		
63	63		
80	80		
100	100		

Packaging

Series	Quantity	
	Pallet	Outer Box
PF-SRC50E	40 pcs.	240 pcs.

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