

# ANTREX Electronics

## Electronic Components Sourcing Information

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### Product Reference Information

|                      |                                    |
|----------------------|------------------------------------|
| <b>Part Number:</b>  | PF-MB1-180                         |
| <b>Manufacturer:</b> | Bourns Inc.                        |
| <b>Package:</b>      | Cylindrical, Blade Terminal (Bolt) |
| <b>Availability:</b> | Please confirm with sales          |

#### Product Page:

<https://antrexco.com/product/details/bourns-inc/pf-mb1-180.html>

#### Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

### Contact Information

Email: [info@antrexco.com](mailto:info@antrexco.com)

WhatsApp: +86-186-8066-5326

Website: <https://antrexco.com>

### Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

#### Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.



## POWrFuse™ PF-M Series Features

- Designed to UL 248-13 semiconductor class aR standard
- 240 VAC / 150 VDC rated voltage
- Designed in the traditional round body bolted style package
- RoHS compliant\* and halogen free\*\*
- Agency recognition: cULus



## PF-M Series – Semiconductor (aR) Power Fuses

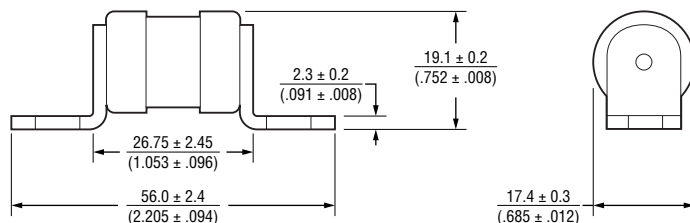
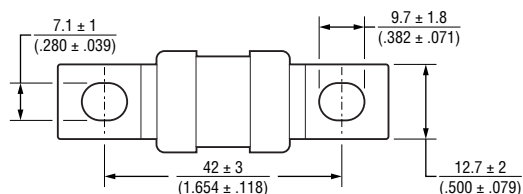
### Electrical Characteristics

| Model      | Rated Current (A) | Nominal Resistance ( $\Omega$ )*** | Rated Voltage      | Interrupting Rating                 | Nominal $I^2t$ (A <sup>2</sup> s)**** | Watts Loss at 100% In (W) | Agency Recognition      |
|------------|-------------------|------------------------------------|--------------------|-------------------------------------|---------------------------------------|---------------------------|-------------------------|
| PF-MB1-50  | 50                | 0.00183                            | 240 VAC<br>150 VDC | 160 kA @ 240 VAC<br>50 kA @ 150 VDC | 2463                                  | 8.8                       | <a href="#">E500949</a> |
| PF-MB1-60  | 60                | 0.00156                            |                    |                                     | 3574                                  | 11                        |                         |
| PF-MB1-70  | 70                | 0.00117                            |                    |                                     | 4047                                  | 12.5                      |                         |
| PF-MB1-80  | 80                | 0.00098                            |                    |                                     | 5447                                  | 13.7                      |                         |
| PF-MB1-100 | 100               | 0.00072                            |                    |                                     | 8352                                  | 16.2                      |                         |
| PF-MB1-125 | 125               | 0.0006                             |                    |                                     | 10077                                 | 22                        |                         |
| PF-MB1-150 | 150               | 0.00049                            |                    |                                     | 15100                                 | 25                        |                         |
| PF-MB1-180 | 180               | 0.00038                            |                    |                                     | 17268                                 | 25                        |                         |

\*\*\* Resistance value measured with  $\leq 10\%$  rated current at 25 °C ambient.

\*\*\*\* Nominal  $I^2t$  value measured at 240 VDC.

### Product Dimensions



### Additional Information

Click these links for more information:



[PRODUCT](#) [TECHNICAL LIBRARY](#) [INVENTORY](#) [SAMPLES](#) [CONTACT](#)

### Environmental Characteristics

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

### Packaging

| Model | Quantity      |
|-------|---------------|
| PF-M  | 10 pcs. / box |

**BOURNS®**

Asia-Pacific: Tel: +886-2 2562-4117 • Email: [asiacus@bourns.com](mailto:asiacus@bourns.com)

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The Americas: Tel: +1-951 781-5500 • Email: [americus@bourns.com](mailto:americus@bourns.com)

[www.bourns.com](http://www.bourns.com)

\* 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.

"POWrFuse" is a trademark of Bourns, Inc.

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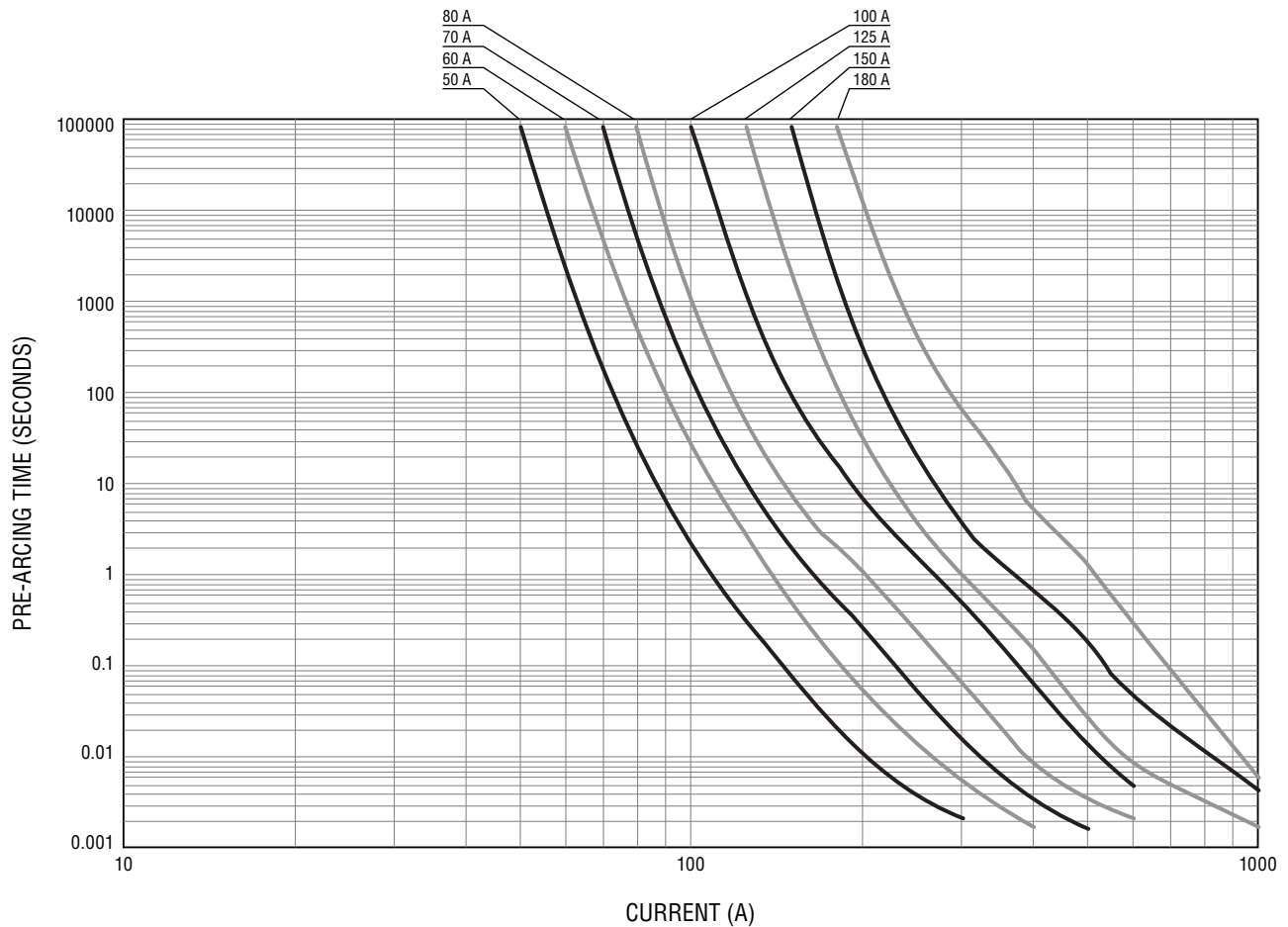


**WARNING**  
Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## PF-M Series – Semiconductor (aR) Power Fuses

**BOURNS®**

**Average Pre-Arcing Time vs. Current Curves**



**Recommended Mounting Torque and Bolt Sizes**

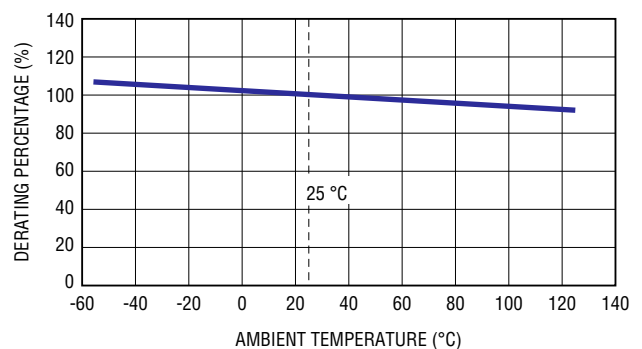
| Mounting Torque | Bolt Size |
|-----------------|-----------|
| 6 ± 1 Nm        | M6        |

**How to Order**

**PF - M B1 - 100**

POWrrFuse™ \_\_\_\_\_  
 Product Designator \_\_\_\_\_  
 Series Name \_\_\_\_\_  
 Mounting Type \_\_\_\_\_  
 B1 = Bolt Mounting, Type 1  
 Rated Current \_\_\_\_\_  
 50 - 180 = 50 A - 180 A

**Current Rating Thermal Derating Curve**



Specifications are subject to change without notice.

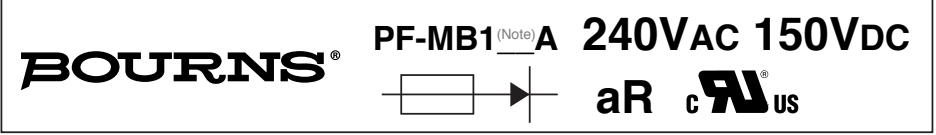
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## PF-M Series – Semiconductor (aR) Power Fuses

**BOURNS®**

### Typical Part Marking

| Model      | Note | Ink Color | Marking                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------|------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PF-MB1-50  | 50   | Black     | <div>  <p>The diagram shows the typical part marking for Bourns PF-MB1 series fuses. It includes the Bourns logo, the part number PF-MB1 followed by a note reference (Note) and the rating A, the voltage ratings 240VAC and 150VDC, the aR (semiconductor) rating, and the cULus (UL recognized component) certification logo.</p> </div> |
| PF-MB1-60  | 60   |           |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PF-MB1-70  | 70   |           |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PF-MB1-80  | 80   |           |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PF-MB1-100 | 100  |           |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PF-MB1-125 | 125  |           |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PF-MB1-150 | 150  |           |                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PF-MB1-180 | 180  |           |                                                                                                                                                                                                                                                                                                                                                                                                                               |

REV. 06/22

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