

Features

- High-inrush current withstand capability
- EIA 1206 (3216 metric) footprint
- AEC-Q200 compliant*
- UL 248-14 listed

Max.

60 seconds

5 seconds

RoHS compliant** and halogen free***

BOURNS

SF-1206HIA-M Series - Automotive Grade High-Inrush SMD Fuses

Clearing Time Characteristics for Series

| Additional | Information |
|------------|-------------|
| | |

Click these links for more information:



Electrical Characteristics

% of Current Rating

100 %

200 % (1 - 6 A)

350 % (0.5 - 0.75 A)

| Model | Rated Current (A) | Resistance (Ω) Typ.***** | Rated Voltage | Interrupting Rating | Typical I ² t (A ² s) ****** | Certifications cUL: <u>E198545</u> |
|------------------|----------------------|-----------------------------|----------------------|------------------------|---|---------------------------------------|
| SF-1206HIA050M-2 | 0.5 | 0.98 | 65 VDC | DC 50 A @ 65 VDC | 0.035 | 1 |
| SF-1206HIA075M-2 | 0.75 | 0.42 | | | 0.1 | 1 |
| SF-1206HIA100M-2 | 1.0 | 0.37 | 63 VDC | C 50 A @ 63 VDC | 0.112 | 1 |
| SF-1206HIA150M-2 | 1.5 | 0.165 | | | 0.336 | 1 |
| SF-1206HIA200M-2 | 2.0 | 0.089 | | | 0.82 | 1 |
| SF-1206HIA300M-2 | 3.0 | 0.039 | 32 VDC 50 A @ 32 VDC | 1.36 | 1 | |
| SF-1206HIA350M-2 | 3.5 | 0.03 | | | 1.89 | 1 |
| SF-1206HIA400M-2 | 4.0 | 0.025 | | | 2.78 | 1 |
| SF-1206HIA450M-2 | 4.5 | 0.023 | | | 3.25 | 1 |
| SF-1206HIA600M-2 | 6.0 | 0.013 | 24 VDC | 80 A @ 24 VDC | 12.8 | 1 |

Resistance value measured with ≤10 % rated current at 25 °C ambient. Tolerance ± 25 %.

Clearing Time @ 25 °C

Min.

4 hours

1 second

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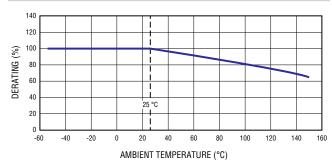
****** Melting I²t calculated at 1000 % of current rating.

Environmental Characteristics

| Operating Temperature | -55 °C to + 150 °C |
|---------------------------------|--------------------|
| Storage Conditions | |
| Temperature | +5 °C to +35 °C |
| Humidity | 40 % to 75 % |
| Moisture Sensitivity Level | 1 |
| ESD Classification ¹ | Class 6 |

¹per AEC-Q200-2, HBM

Current Rating Thermal Derating Curve





- Meets Bourns' internal AEC-Q200 equivalent test plan.
- RoHS Directive 2015/863, Mar 31, 2015 and Annex. * *
- ^r 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.

"SinglFuse" is a trademark of Bourns, Inc.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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SF-1206HIA-M Series – Automotive Grade High-Inrush SMD Fuses

How to Order

Bourns

Typical Part Marking

Represents total content. Layout may vary. Markings in green color.

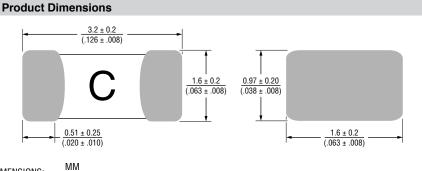


| Rated Current | Part Marking | Rated Current | Part Marking |
|------------------|-----------------|------------------|-----------------|
| 0.5 A | С | 3 A | к |
| 0.75 A | D | 3.5 A | L |
| 1 A | E | 4 A | М |
| 1.5 A | G | 4.5 A | Т |
| 2 A | I | 6 A | 0 |

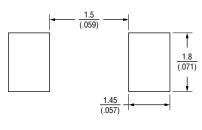
SF - 1206 HI A 050 M - 2 SinglFuse[™] -Product Designator SMD Footprint _____ 1206 = EIA 1206 (3216 metric) Fuse Blow Type HI = High Inrush Current Withstand Automotive Grade Rated Current $050 \sim 600 = 0.5 \text{ A} \sim 6 \text{ A}$ Structure Type M = Ceramic Multilayer

Packaging

| Reel Dimension | 7-inch Tape and Reel | |
|----------------|----------------------|--|
| Specification | EIA 481-2 | |
| Quantity | 3,000 pieces | |
| Packaging Code | -2 | |



Recommended Pad Layout



MM DIMENSIONS: (INCHES)

DIMENSIONS:

(INCHES)

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