SingIFuse™ SF-1210SxxxW Series Features

- Single blow fuse for overcurrent protection
- 3225 (EIA 1210) footprint
- Slow blow fuse
- UL 248-14 listed
- RoHS compliant* and halogen free**
- Wire core SMD design
- Surface mount packaging for automated assembly

SF-1210SxxxW Series - Slow Blow Wire Core Surface Mount Fuses

Electrical Characteristics

Model	Rated Current (Amps)	Fusing Time	Resistance (Ω) Typ.***	Rated Voltage	Interrupting Rating	Typical I^2t (A^2s) ****
SF-1210S100W-2	1.00	Open within 5 sec. at 250 % rated current	0.079	AC 125 V	AC 125 V 100 A DC 65 V 100 A	0.20
SF-1210S150W-2	1.50		0.050			0.50
SF-1210S200W-2	2.00		0.037			0.90
SF-1210S250W-2	2.50		0.033			1.20
SF-1210S300W-2	3.00		0.028			1.50

*** Resistance value measured with ≤10 % rated current at 25 °C ambient.
**** Melting I^2t calculated at 0.001 second pre-arcing time.

Reliability Testing

No.	Test	Requirement	Test Condition	Test Reference
1	Reflow and bend	DCR change ≤ 20 % (≤ 10 % for ≤1 A) No mechanical damage	3 reflows at 245 °C followed by a 2 mm bend	Refer to STP document
2	Solderability	Minimum 90 % coverage	One dip at 245 °C for 5 seconds	MIL-STD-202 Method 208
3	Soldering heat resistance	DCR change ≤ 20 % (≤ 10 % for ≤1 A) New solder coverage ≤ 75 %	One dip at 260 °C for 10 seconds	MIL-STD-202 Method 210
4	Moisture resistance	DCR change ≤ ±15 % No excessive corrosion	10 cycles	MIL-STD-202 Method 106
5	Salt spray	DCR change ≤ ±10 % No excessive corrosion	48 hour exposure, 5 % salt solution	MIL-STD-202 Method 101
6	Mechanical vibration	DCR change ≤ ±10 % No mechanical damage	0.4 inch D.A. or 30 G between 5-3000 Hz	MIL-STD-202 Method 204
7	Mechanical shock	DCR change ≤ ±10 % No mechanical damage	1500 G, 0.5 ms, half-sine shocks	MIL-STD-202 Method 213
8	Thermal Shock	DCR change ≤ ±10 % No mechanical damage	100 cycles between -65 °C and +125 °C	MIL-STD-202 Method 107
9	Life	No electrical “opens” during testing Voltage drop change shall be less than ±20 % of initial value	80 % rated current (75 % for < 1 A fuses) for 2000 hours at ambient temperature +25 °C	Refer to STP document

Agency Recognition

UL File Number E198545

http://www.ul.com/ Follow link to Online Certificates Directory, then enter UL File No. E198545, or click here

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*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.

“SingIFuse” is a trademark of Bourns, Inc.
Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

SingIFuse™ SF-1210SxxxW Series Applications

- White goods
- Lighting and drivers
- DC/DC converters
- Low voltage power and chargers
- Industrial equipment

SF-1210SxxxW Series - Slow Blow Wire Core Surface Mount Fuses

BOURNS®

Environmental Characteristics

Operating Temperature ..... -55 °C to +125 °C
Storage Conditions
- Temperature ..... +5 °C to +35 °C
- Humidity ..... 40 % to 75 %
- Shelf Life ..... 2 years from manufacturing date

Moisture Sensitivity Level 1
ESD Classification (HBM) ..... Class 6

Typical Part Marking

Represents total content. Layout may vary.

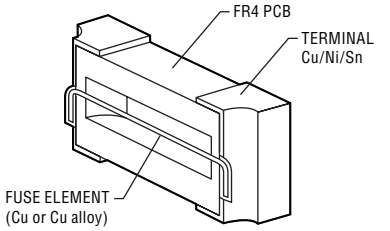
RATED CURRENT (A)
E = 1.00 J = 2.50
G = 1.50 K = 3.00
I = 2.00

How to Order

SF - 1210 S 150 W - 2

- SingIFuse™ Product Designator
- SMD Footprint
  1210 = 3225 (EIA 1210) size
- Fuse Blow Type
  S = Slow Blow
- Rated Current
  100 ~ 300 (1.00 A ~ 3.00 A)
- Structure Type
  W = Wire Core
- Packaging Type
  - 2 = Tape & Reel

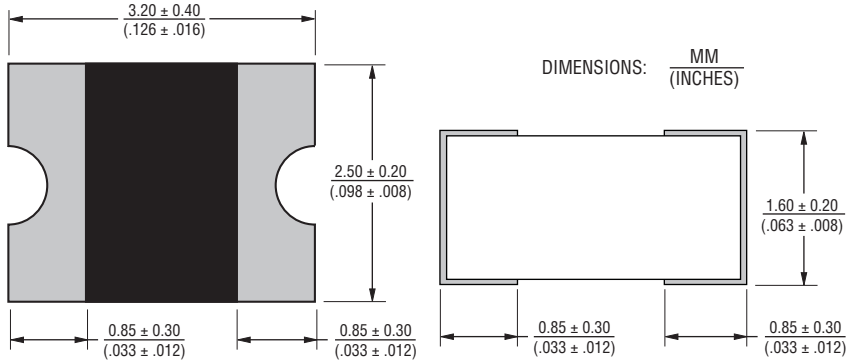
Construction



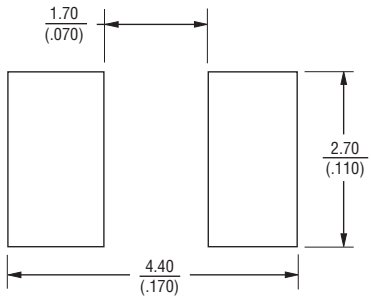
Packaging Quantity

2,500 pieces per 7-inch reel

Product Dimensions



Recommended Pad Layout



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