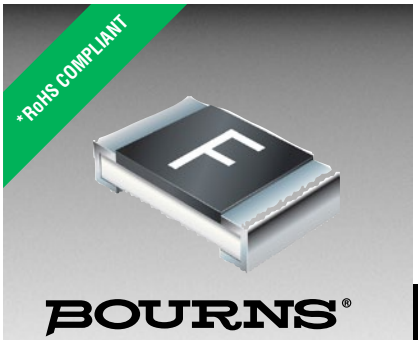


SingIFuse™ SF-1206S Series Features

- Single blow fuse for overcurrent protection
- 3216 (EIA 1206) miniature footprint
- Slow blow fuse
- UL listed
- RoHS compliant* and halogen free**
- Thin film chip fuse
- Surface mount packaging for automated assembly

SF-1206S Series - Slow Blow Surface Mount Fuses

Electrical Characteristics

Model	Rated Current (Amps)	Fusing Time	Resistance (mΩ) Typ.***	Rated Voltage	Breaking Capacity	Typical I^2t (A^2s)
SF-1206S050	0.50	Open within 5 sec. at 250 % rated current	596	DC 63 V	DC 63 V 50 A	0.030
SF-1206S080	0.80		165			0.068
SF-1206S100	1.00		132			0.098
SF-1206S125	1.25		90			0.155
SF-1206S150	1.50		79			0.236
SF-1206S200	2.00		41			0.339
SF-1206S250	2.50		33	DC 32 V	DC 32 V 50 A	0.605
SF-1206S300	3.00		23			0.933
SF-1206S400	4.00		15.5			1.537
SF-1206S500	5.00		13			2.533
SF-1206S700	7.00		7			5.684

***Resistance value was measured with less than 10 % of rated current. Resistance tolerance is ±25 %.

Reliability Testing

Parameter	Requirement	Test Method
Carrying Capacity	No fusing	Rated current, 4 hours
Fusing Time	Within 5 seconds	250 % of its rated current
Interrupting Ability	No mechanical damages	After the fuse is interrupted, rated voltage applied for 30 seconds again
Bending Test	No mechanical damages	Distance between holding points: 90 mm, Bending: 3 mm,1time, 30 seconds
Resistance to Solder Heat	±20 %	260 °C ±5 °C,10 ±1 second
Solderability	95 % coverage minimum	235 °C ±5 °C, 2 ±0.5 second 245 °C ±5 °C, 2 ±0.5 second (lead free)
Temperature Rise	<75 °C	100 % of its rated current, measure of surface temperature
Resistance to Dry Heat	±20 %	105 °C ±5 °C,1000 hours
Resistance to Solvent	No evident damage on protective coating and marking	23 °C ±5 °C of isopropyl alcohol, 90 seconds
Residual Resistance	10k W or more	Measure DC resistance after fusing
Thermal Shock	ΔR < 10 %	-20 °C / +25 °C /+125 °C /+25 °C, 10 cycles

Typical Part Marking

Represents total content. Layout may vary.

RATING CURRENT (A)

F = 0.50	T = 2.50
K = 0.80	3 = 3.00
L = 1.00	W = 4.00
M = 1.25	Y = 5.00
P = 1.50	Z = 7.00
S = 2.00	

How to Order

SF - 1206 S 050 - 2

SingIFuse™ Product Designator

SMD Footprint
3216 (EIA 1206) size

Fuse Blow Type
F = Fast Acting FP = Fast Acting Precision
S = Slow Blow SP = Time Lag

Rated Current
050-700 (500 mA - 7.00 A)

Packaging Type
- 2 = Tape & Reel (5,000 pcs./reel)

* RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

** Bourns is using the definition that appears to be the prevalent definition used as the industry standard at this time. The Bourns definition of "halogen-free" is: Bromine (Br) content: ≤ 900 ppm; Chlorine (Cl) content: ≤ 900 ppm; Total Br + Cl content: ≤1500 ppm.

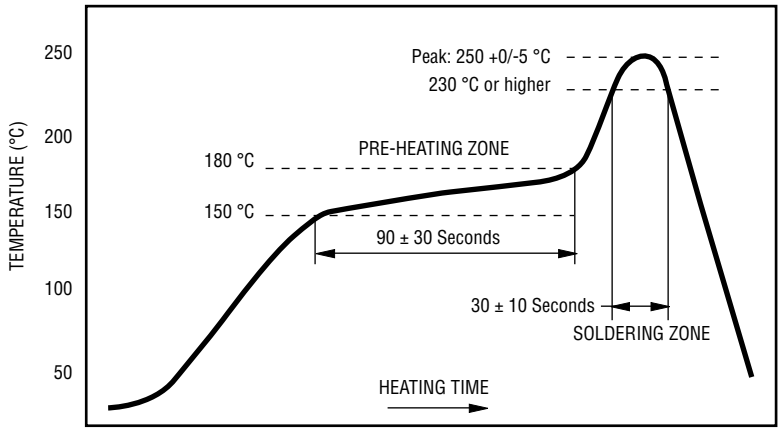
SingIFuse™ SF-1206S Series Applications

- Portable memory
- LCD monitors
- Disk drives
- PDAs
- Digital cameras
- DVDs
- Cell phones
- Rechargeable battery packs
- Battery chargers
- Set top boxes
- Industrial controllers

SF-1206S Series - Slow Blow Surface Mount Fuses

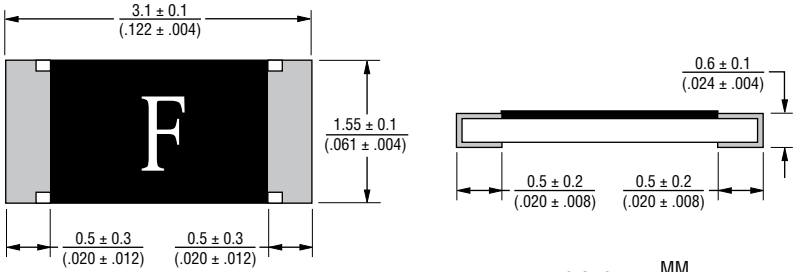
BOURNS®

Solder Reflow Recommendations



PEAK: 250 +0/-5 °C, 5 seconds
PRE-HEATING ZONE: 150 to 180 °C, 90 ± 30 seconds
SOLDERING ZONE: 230 °C or higher, 30 ± 10 seconds

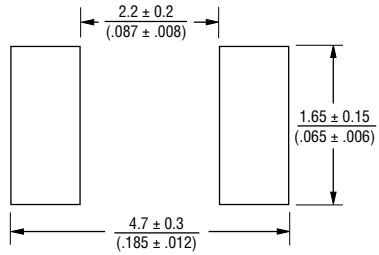
Product Dimensions



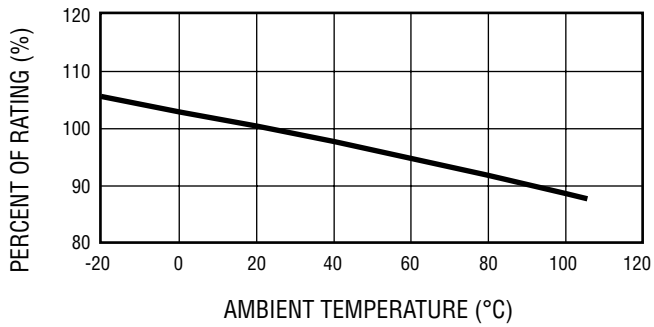
DIMENSIONS: MM / (INCHES)

PACKAGING: 5,000 pcs./reel

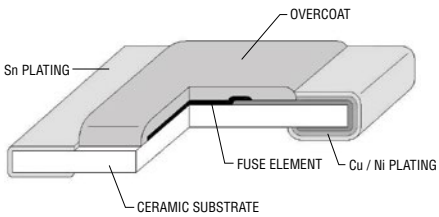
Recommended Pad Layout



Thermal Derating Curve

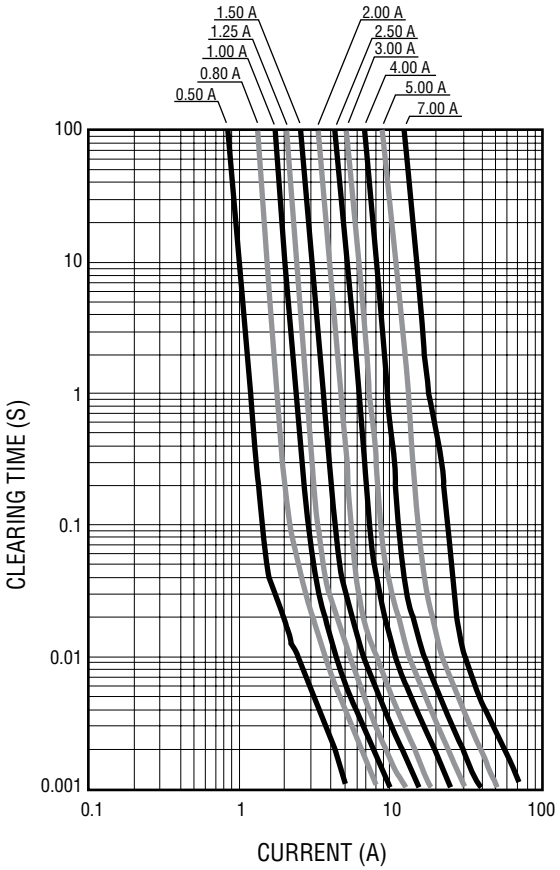


Construction & Material Content

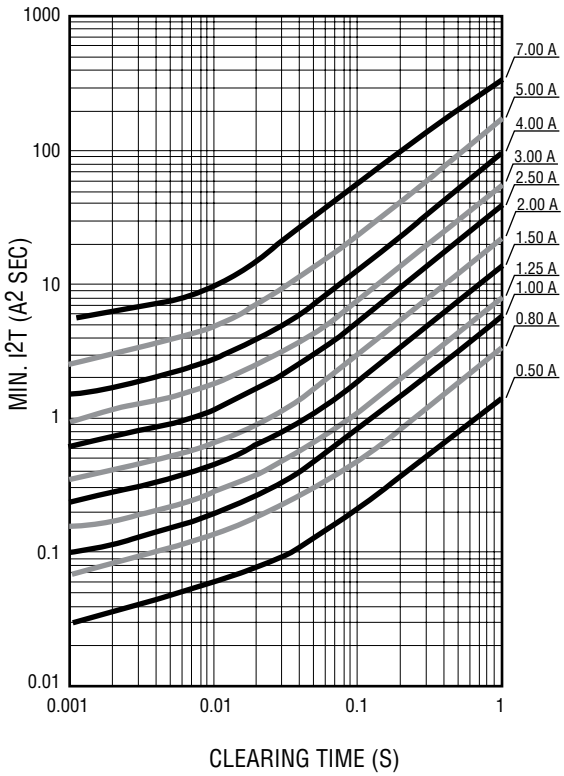


Operating Temperature.....-40 °C to +105 °C
Storage Conditions
Temperature .....+5 °C to +35 °C
Humidity.....40 % to 75 %
Shelf Life..... 2 years from manufacturing date

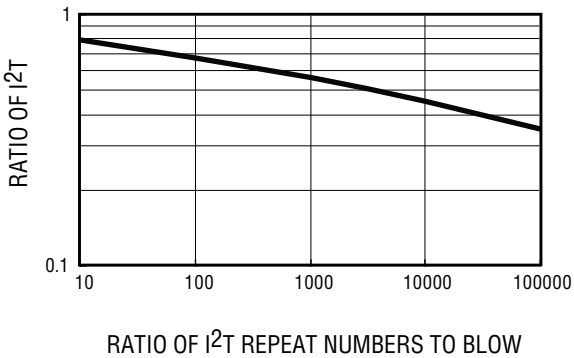
Average Time Current Curves



Minimum I²T V Clear Time Curves



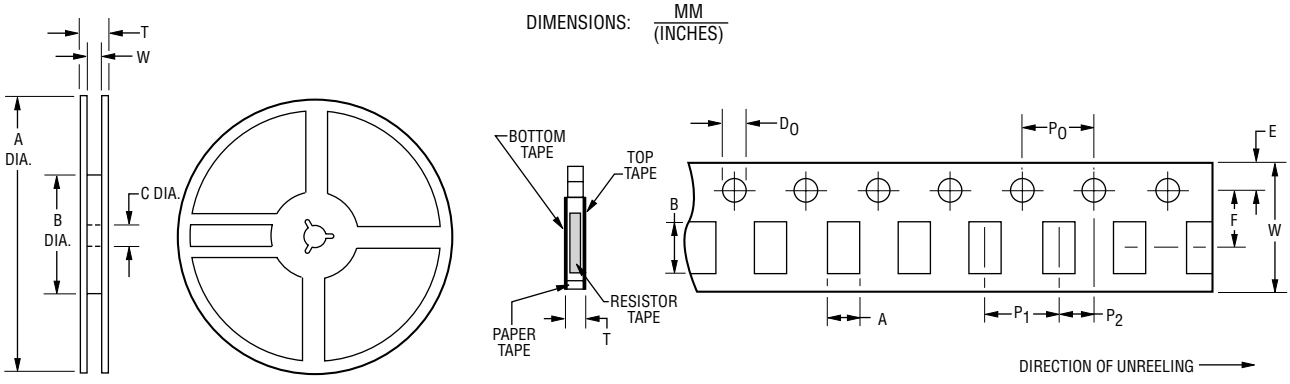
I2T Derating Curve by Repeater Rush Current



SF-1206S Series Tape and Reel Specifications

BOURNS®

Tape Dimensions	SF-1206S Series per EIA 481-2
W	8.0 ± 0.2 (.315 ± .008)
P_0	4.0 ± 0.1 (.157 ± .004)
P_1	4.0 ± 0.1 (.157 ± .004)
P_2	2.0 ± 0.05 (.079 ± .002)
A	2.0 ± 0.15 (.079 ± .006)
B	3.6 ± 0.2 (.142 ± .008)
F	3.5 ± 0.05 (.138 ± .002)
E	1.75 ± 0.1 (.069 ± .004)
D_0	1.5 + 0.1/-0 (.059 + .004/-0)
T	0.84 ± 0.1 (.033 ± .004)
Reel Dimensions	
A	180 +0/-3.0 (7.087 +0/-.118)
B Min.	60.0 (2.362)
C	13.0 ± 1.0 (.512 ± .039)
W	9.0 ± 1.0 (.354 ± .039)
T	11.4 ± 2.0 (.449 ± .079)



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bourns:

SF-1206S300-2 SF-1206S080-2 SF-1206S500-2 SF-1206S050-2 SF-1206S700-2 SF-1206S250-2 SF-1206S100-2 SF-1206S200-2 SF-1206S150-2 SF-1206S125-2 SF-1206S400-2