

RoHS  **388 Series** Lead-Free 3AG, METI B Fuse



### Description

The Littelfuse 388 Series is a 3AG size fuse that solves a broad range of application requirements while offering reliable performance and cost-effective circuit protection.

### Features

- Designed to Japanese Standard JIS C6575
- Available in cartridge and axial lead form and various forming dimensions
- RoHS compliant and Lead-free

### Applications

Used as supplementary protection in appliance or utilization equipment to provide individual protection for components or internal circuits.

### Agency Approvals

Agency	Agency File Number	Ampere Range
	NBK131107-JP1021A NBK010207-JP1021A/B/C/D	1A - 30A
	SU05001-8001 SU05001-7001/2/3/4	3A - 6A 7A/10A - 30A
		1A - 30A

### Electrical Characteristics for Series

% of Ampere Rating	Opening Time
130	1 Hour, Minimum
160	1 hour, Maximum
200	120 seconds, Maximum

### Electrical Characteristic Specifications by Item

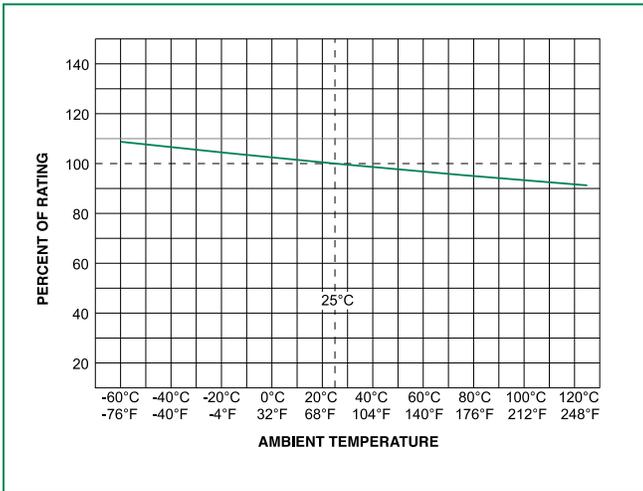
Amp Code	Amp Rating	Voltage Rating	Breaking Capacity	Nominal Resistance Cold Ohms (ohms)	Nominal Melting 2T (A2Sec.)	Agency Approvals		
								
001.	1	250	100A @ 250Vac	0.1651	0.800	x		x
01.5	1.5	250		0.0845	2.680	x		x
002.	2	250		0.0522	7.200	x		x
02.5	2.5	250		0.0375	9.540	x		x
003.	3	250		0.0313	22.10	x	x	x
004.	4	250		0.0239	28.50	x	x	x
005.	5	250		0.0184	66.10	x	x	x
006.	6	250		0.0140	116.0	x	x	x
007.	7	250		0.0127	118.0	x	x	x
008.	8	250		0.0109	166.0	x		x
009.	9	250		0.0082	298.0	x		x
010.	10	250		0.0072	234.6	x	x	x
012.	12	250		0.0052	490.5	x	x	x
015.	15	250		0.0042	1029	x	x	x
020.	20	250		0.0029	2041	x	x	x
025.	25	250		0.0019	3717	x	x	x
030.	30	250		0.0013	7531	x	x	x

<sup>1</sup> Depending on the application and mounting, the fuse heating at max. ambient temperature in a closed fuseholder should be considered.

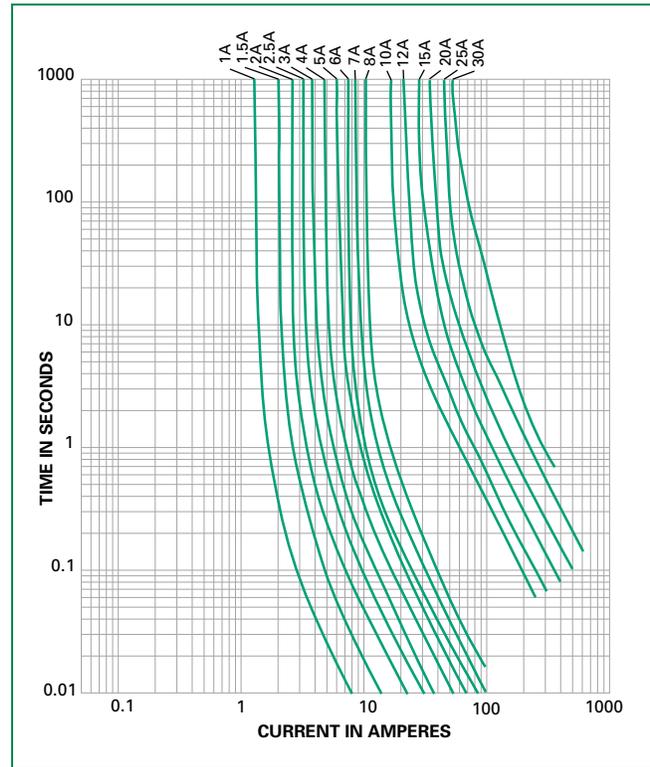
p = pending

Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

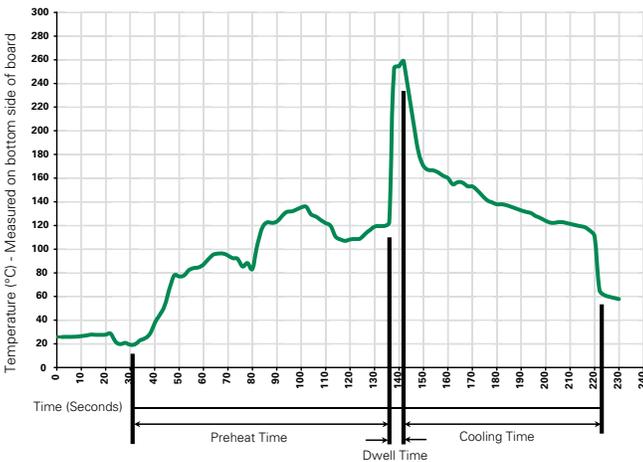
### Temperature Derating Curve



### Average Time Current Curves



### Soldering Parameters - Wave Soldering



#### Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
<b>Preheat:</b> (Depends on Flux Activation Temperature) (Typical Industry Recommendation)	
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
<b>Solder Pot Temperature:</b>	260° C Maximum
<b>Solder Dwell Time:</b>	2-5 seconds

#### Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350° C +/- 5° C  
 Heating Time: 5 seconds max.

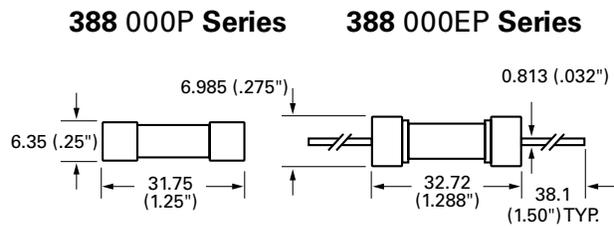
**Note: These devices are not recommended for IR or Convection Reflow process.**

### Product Characteristics

<b>Materials</b>	Body: Glass End Caps: Nickel-plated brass Leads: Tin-plated Copper
<b>Terminal Strength</b>	MIL-STD-202G, Method 211A, Test Condition A
<b>Solderability</b>	Reference IEC 60127 Second Edition 2003-2001 Annex A
<b>Product Marking</b>	Cap1: Brand logo, current and voltage ratings Cap2: Series and agency approval marks

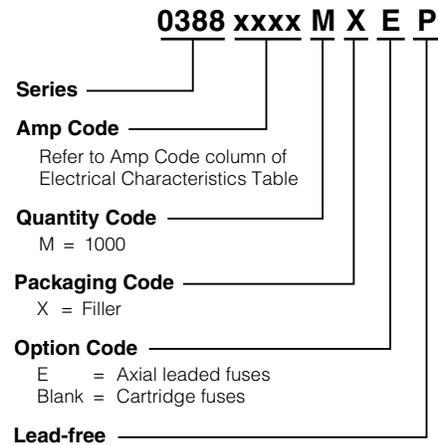
<b>Operating Temperature</b>	-55°C to +125°C (consider de-rating)
<b>Thermal Shock</b>	MIL-STD-202G Method 107 G, Test condition B:(5 cycles - 65°C to 125°C)
<b>Vibration</b>	MIL-STD-202G, Method 201A
<b>Humidity</b>	MIL-STD-202G, Method 103B, Test Condition A: High RH (95%) and Elevated temperature (40°C) for 240 hours
<b>Salt Spray</b>	MIL-STD-202G, Method 101D, Test Condition B

### Dimensions (mm)



Axial Lead Material: Tin coated copper.

### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
<b>388 Series</b>				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXE	N/A