

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
- RoHS compliant and Lead-free
- Available in cartridge and axial lead form and various forming dimensions

Applications

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

Electrical Characteristics for Series

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

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 Characteristic Specifications by Item

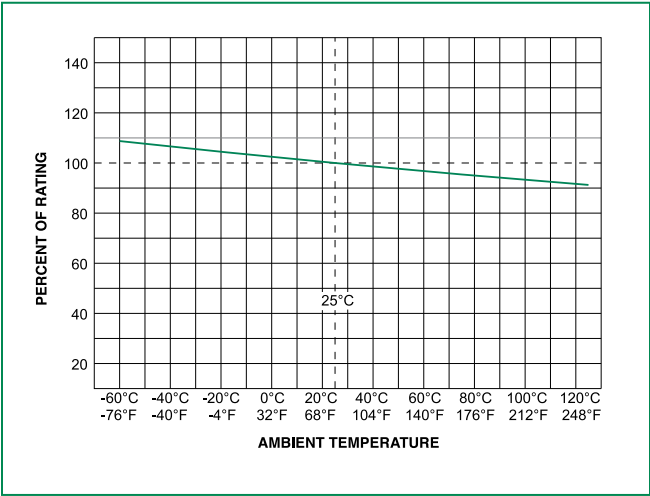
Amp Code	Amp Rating	Voltage Rating	Breaking Capacity	Nominal Resistance Cold Ohms (ohms)	Nominal Melting 2T (A2Sec.)	Agency Approvals		
								
001.	1	250	100A @ 250Vac	0.1651	0.800	x		x
01.5	1.5	250		0.0845	2.680	x		x
002.	2	250		0.0522	7.200	x		x
02.5	2.5	250		0.0375	9.540	x		x
003.	3	250		0.0313	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

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

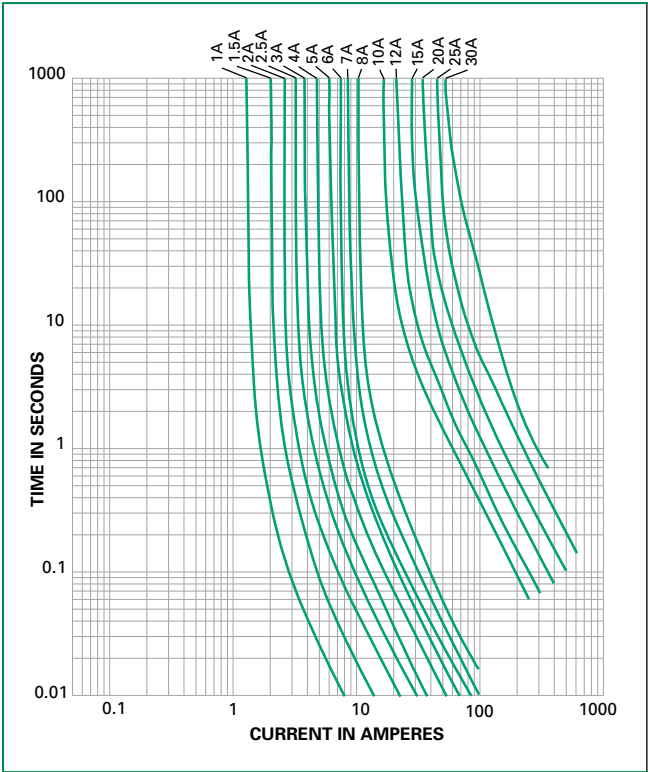
p = pending

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

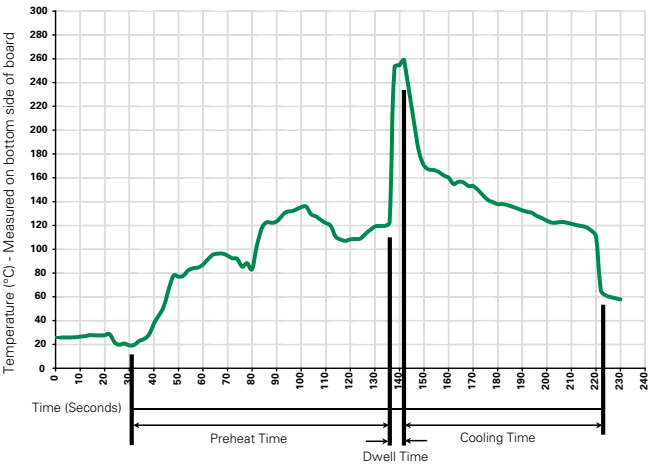
Temperature Derating Curve



Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

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

Recommended Hand-Solder Parameters:

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

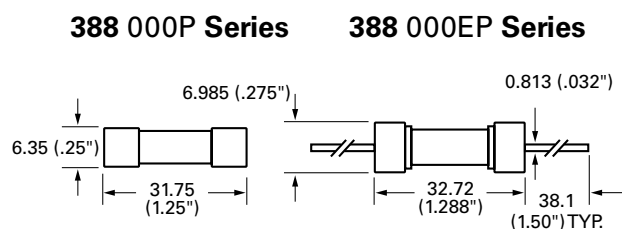
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

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

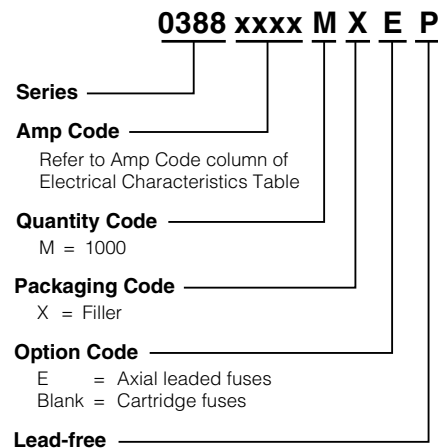
Operating Temperature	-55°C to +125°C (consider de-rating)
Thermal Shock	MIL-STD-202G Method 107 G, Test condition B:(5 cycles - 65°C to 125°C)
Vibration	MIL-STD-202G, Method 201A
Humidity	MIL-STD-202G, Method 103B, Test Condition A: High RH (95%) and Elevated temperature (40°C) for 240 hours
Salt Spray	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
388 Series				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXE	N/A