

阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。




Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

448 Series Fuse



Agency Approvals

AGENCY	AGENCY FILE NUMBER	AMPERE RANGE
	E10480	0.062A - 15A
	29862	0.062A - 15A
	NBK030205-E10480A NBK030205-E10480B	1A - 1.6A 2A - 5A

Electrical Characteristics for Series

% of Ampere Rating	Ampere Rating	Opening Time
100%	1/16 –15	4 hours, Minimum
200%	1/16 –10	5 sec., Maximum
	12 –15	20 sec., Maximum

Description

The lead-free Nano²® SMF Fuse is a very small, square surface mount fuse that is RoHS compliant, Halogen Free and 100% lead-free. This product is fully compatible with lead-free solder alloys and higher temperature profiles associated with lead-free assembly.

Features

- RoHS compliant, Lead-free and Halogen Free
- Very fast-acting
- Small size
- Wide range of current rating available (0.062A to 15A)
- Wide operating temperature range
- Low temperature de-rating

Applications

- Notebook PC
- LCD/PDPTV
- LCD monitor
- LCD/PDP panel
- LCD backlight inverter
- Portable DVD player
- Power supply
- Networking
- PC server
- Cooling fan system
- Storage system
- Telecom system
- Wireless basestation
- White goods
- Game console
- Office Automation equipment
- Battery charging circuit protection
- Industrial equipment

Additional Information



Datasheet






Resources



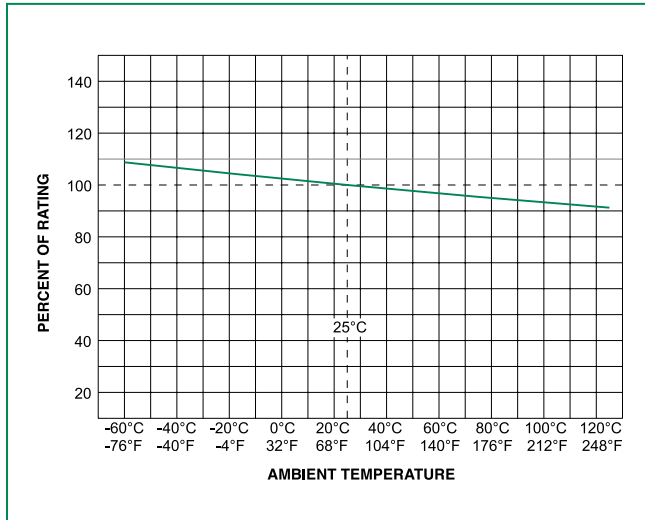
Samples

Electrical Specifications by Item

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Agency Approvals		
								
0.062	.062	125	50A @125VAC/VDC 300A @32 VDC PSE: 100A @100VAC	5.56	0.00023	x	x	
0.080	.080	125		4.47	0.00043	x	x	
0.100	.100	125		2.94	0.00082	x	x	
0.125	.125	125		2.05	0.00130	x	x	
0.160	.160	125		1.67	0.00280	x	x	
0.200	.200	125		1.24	0.00380	x	x	
0.250	.250	125		0.95	0.01520	x	x	
0.315	.315	125		0.7015	0.02650	x	x	
0.375	.375	125		0.6155	0.02400	x	x	
0.400	.400	125		0.4895	0.04160	x	x	
0.500	.500	125		0.3800	0.10000	x	x	
0.630	.630	125		0.3125	0.121	x	x	
0.750	.750	125		0.2290	0.206	x	x	
0.800	.800	125		0.1907	0.272	x	x	
1.00	001.	125		0.08630	0.441	x	x	x
1.25	1.25	125		0.06619	0.900	x	x	x
1.50	01.5	125		0.06514	0.900	x	x	x
1.60	01.6	125		0.06261	1.122	x	x	x
2.00	002.	125		0.03529	0.812	x	x	x
2.50	02.5	125		0.02934	1.156	x	x	x
3.00	003.	125		0.02445	1.720	x	x	x
3.15	3.15	125		0.02300	1.810	x	x	x
3.50	03.5	125		0.02100	2.300	x	x	x
4.00	004.	125		0.01577	3.970	x	x	x
5.00	005.	125	0.01531	4.490	x	x	x	
6.30	06.3	125	0.01044	12.10	x	x	x	
7.00	007.	125	0.00900	13.92	x	x	x	
8.00	008.	125	0.00780	18.33	x	x	x	
10.00	010.	125	35A @125 VAC 50A @125 VDC 300A @32 VDC PSE: 100A @100VAC	0.00700	28.00	x	x	x
12.00	012.	85	50A @65 VAC/VDC 300A @24 VDC 200A @85 VDC	0.00533	47.59	x	x	
15.00	015.	85		0.00394	78.4	x	x	

Notes:
 - I²t calculated at 8ms.
 - Resistance is measured at 10% of rated current, 25°C

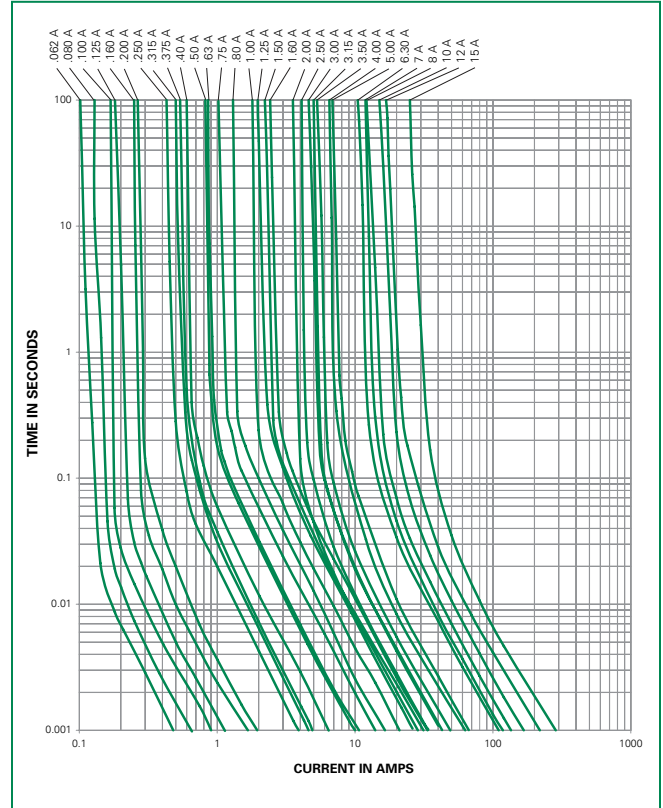
Temperature Re-rating Curve



Note:

1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

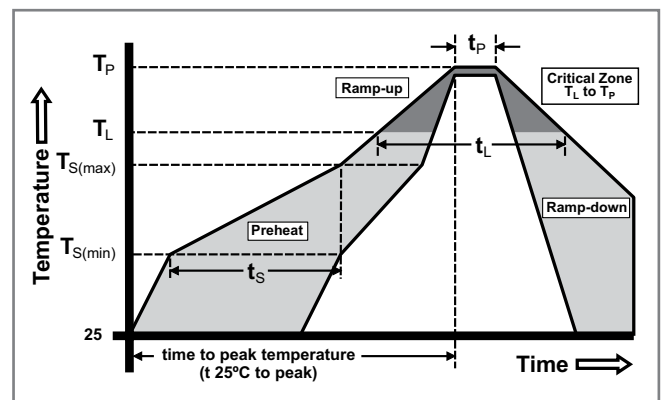
Average Time Current Curves



Soldering Parameters

Reflow Condition		Pb – Free assembly
Pre Heat	- Temperature Min ($T_{s(min)}$)	150°C
	- Temperature Max ($T_{s(max)}$)	200°C
	- Time (Min to Max) (t_s)	60 – 120 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		5°C/second max.
$T_{s(max)}$ to T_L - Ramp-up Rate		5°C/second max.
Reflow	- Temperature (T_L) (Liquidus)	217°C
	- Temperature (t_L)	60 – 90 seconds
Peak Temperature (T_p)		260 ^{+0/-5} °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		5°C/second max.
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

Wave Soldering Parameters	260°C Peak Temperature, 10 seconds max.
---------------------------	---

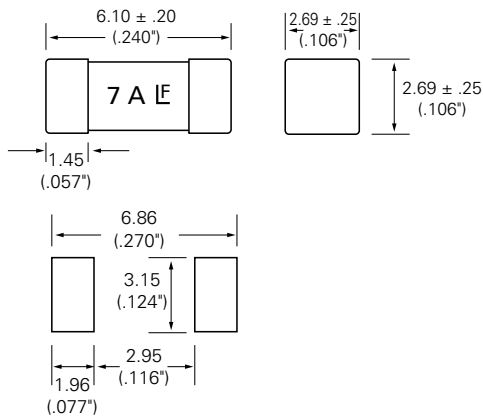


Product Characteristics

Materials	Body: Ceramic Terminations: Gold-plated Caps
Product Marking	Brand, Amperage Rating
Operating Temperature	-55°C to 125°C
Moisture Sensitivity Level	Level 1, J-STD-020
Solderability	MIL-STD-202, Method 208
Insulation Resistance (after Opening)	MIL-STD-202, Method 302, Test Condition A (10,000 ohms minimum)

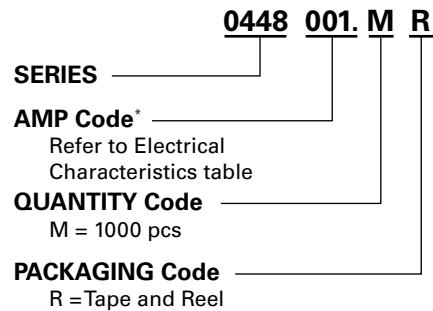
Thermal Shock	MIL-STD-202, Method 107, Test Condition B, 5 cycles, -65°C to 125°C, 15 minutes @ each extreme
Mechanical Shock	MIL-STD-202, Method 213, Test I: Deenergized. 100G's pk amplitude, sawtooth wave 6ms duration, 3 cycles XYZ+xyz = 18 shocks
Vibration	MIL-STD-202, Method 201: 0.03" amplitude, 10-55 Hz in 1 min. 2hrs each XYZ=6hrs
Moisture Resistance	MIL-STD-202, Method 106, 10 cycles
Salt Spray	MIL-STD-202, Method 101, Test Condition B (48hrs)
Resistance to Soldering Heat	MIL-STD-202, Method 210, Test condition B (10 sec at 260°C)

Dimensions



Recommended pad layout

Part Numbering System



***Example:**
1.5 amp product is 044801.5MR
(1 amp product shown above).

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
12mm Tape and Reel	EIA RS-481-1 (IEC 286, part 3)	1000	MR