

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" .

160 Series Fuse and Clip Assembly





Description

The 160 Series product is a metal fuse clip with pre-installed Littelfuse 443 Series Fuse. This fuse and clip combination can be automatically installed in PC Boards in one efficient manufacturing operation. It permits quick and easy fuse replacement without exposing the PC Boards and other components to risks of rework solder heat as required with direct surface mount fuses.

It is designed to enable compliance with the RoHS directive. This product is fully compatible with lead-free solder alloy and higher temperature profiles associated with lead-free assembly.

Agency Approvals

AGENCY	AGENCY FILE NUMBER	AMPERE RANGE
	NBK290416-JP1021	1.00A – 5.00A*
	E14721	0.5A - 5A

Note * - PSE/METI Certification is only applicable to the fuse. Clips do not require certification for the Japanese Market.

Electrical Characteristics for Series

% of Ampere Rating	Opening Time
100%	4 hours, Minimum
250%	120 seconds, Maximum

Additional Information



Datashheet



Resources



Samples



Features

- Offer low profile easily-replaceable fuse alternative compatible with automated PCB surface mount equipment
- Comes supplied with Littelfuse 443 Series 250V Nano²® Fuse
- RoHS compliant and Halogen Free
- Clip fully compatible with RoHS/lead-free solder alloys and higher temperature profiles associated with lead-free assembly
- 0.5A - 5A ampere rating available

Applications

- AC/DC power adaptor
- Telecom equipment system power
- Portable system built-in AC/DC converter
- High voltage DC/DC converter
- Lighting System
- LED Lighting

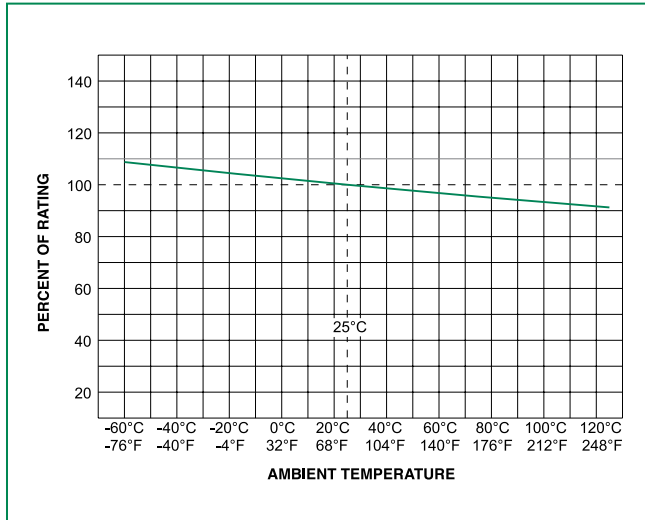
Electrical Specifications by Item

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Nominal Voltage Drop (mV)	Agency Approvals	
								
0.50	0.50	250	50 A @ 250 VAC	.5974	1.96	334		X
0.75	0.75	250		.2729	3.025	223		X
1.00	001.	250		.1826	9.00	207	X	X
1.50	01.5	250		.1100	15.21	210	X	X
2.00	002.	250		.0511	18.50	117	X	X
2.50	02.5	250		.0392	22.20	156	X	X
3.00	003.	250		.0276	59.29	103	X	X
3.50	03.5	250		.0199	59.34	87	X	X
4.00	004.	250		.0160	122.5	83	X	X
5.00	005.	250		.0115	180.6	73	X	X

Notes:

1. Cold resistance measured at less than 10% of rated current at 23°C.
2. Agency Approval Table Key: X=Approved or Certified, P=Pending.

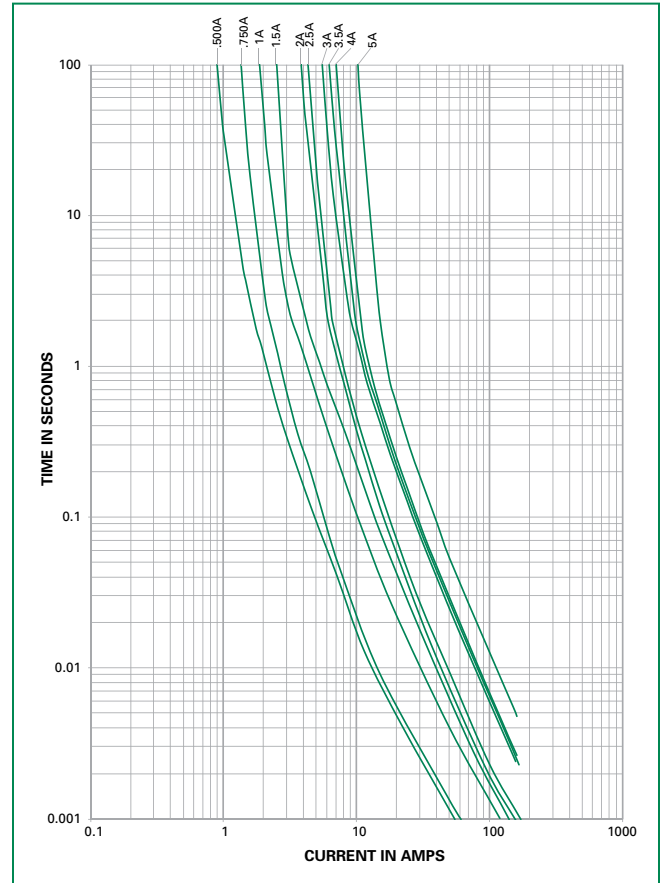
Temperature Re-rating Curve



Note:

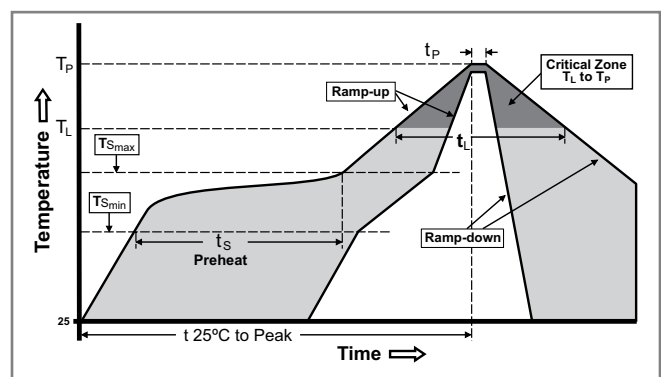
1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

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 – 180 seconds
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 – 150 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	

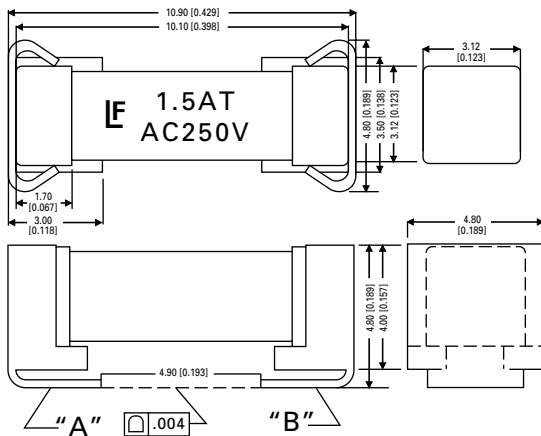


Product Characteristics

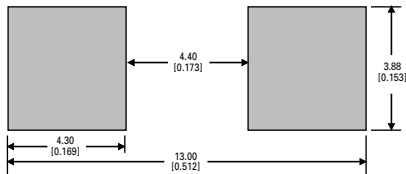
Materials	Body: Ceramic Cap: Silver-plated Brass
Product Marking	Brand, Ampere Rating, Voltage Rating, UMF Logo
Insulation Resistance (after Opening)	MIL-STD-202, Method 302, Test Condition A (10,000 ohms, Minimum)
Solderability	MIL-STD-202, Method 208
Resistance to Soldering Heat	MIL-STD-202, Method 210, Test Condition B (10 seconds at 260°C)
Moisture Sensitivity Level	Level 1 J-STD-020

Operating Temperature	-55°C to 125°C with proper re-rating
Thermal Shock	MIL-STD-202, Method 107, Test Condition B (5 cycles, -65°C to 125°C)
Vibration	MIL-STD-202, Method 201 (10-55 Hz)
Moisture Resistance	MIL-STD-202, Method 106, High Humidity (90-98% RH), Heat (65°C)
Salt Spray	MIL-STD-202, Method 101, Test Condition B
Mechanical Shock	MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 msecs.)

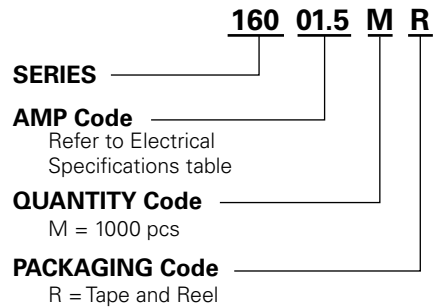
Dimensions



Recommended Pad Layout



Part Numbering System



Example:
1.5 amp product is
016001.5 MR

Packaging

Form Factor	Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
Surface Mount	24mm Tape and Reel	EIA-RS 481-2 (IEC 286, part 3)	1000	MR

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at www.littelfuse.com/disclaimer-electronics.