

443 Series

Slo-Blo® Fuse



Additional Information



Resources



Accessories



Samples

Description

The 250V Nano2® Fuse is a small square surface mount fuse that 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.

Features

- 250 VAC voltage rating
- Slo-Blo® Fuse
- Available 0.50A – 5.00A
- Halogen-free and RoHS Compliant
- Fully compatible with lead-free solder alloys and higher temperature profiles associated with lead-free assembly
- Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14
- Conforms to K60127-1 and K60127-7
- Conforms to DENAN's Appendix 3
- Conforms to IEC/EN 60127-1 and IEC/EN 60127-7

Applications

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

Agency Approvals

Agency	Agency File Number	Ampere Range
UL	E10480	0.500A - 5.00A
CSA	SU05024 -14004	0.500A - 0.750A
	SU05024 -14003	1.00A - 2.50A
	SU05024 -14002	3.00A - 5.00A
PS	NBK290416-JP1021	1.00A – 5.00A
△	R50310551	0.500A - 5.00A

Electrical Characteristics for Series

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

Electrical Specifications by Item

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating ⁴	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Nominal Voltage Drop (mV)	Agency Approvals			
							UL	CSA	PS	△
0.50	.500	250	50A @ 250VAC 100A @ 125VDC	0.600	1.61	448	x	x	-	x
0.75	.750	250		0.275	3.025	285	x	x	-	x
1	001.	250		0.180	10.17	234	x	x	x	x
1.50	01.5	250		0.100	14.72	196	x	x	x	x
2	002.	250		0.052	18.06	154	x	x	x	x
2.50	02.5	250		0.035	18.13	139	x	x	x	x
3	003.	250		0.028	51.44	113	x	x	x	x
3.50	03.5	250		0.019	53.14	98	x	x	x	x
4	004.	250		0.016	122.5	81	x	x	x	x
5	005.	250		0.0115	180.6	80	x	x	x	x

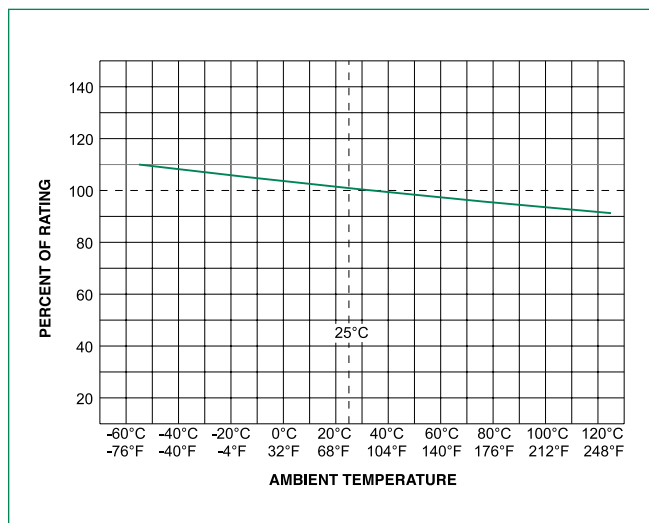
Notes:

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 and Blank=Not Approved
3. Have special electrical characteristic needs? Contact Littelfuse to learn more about application specific options.
4. Interrupting Rating may differ based on Agency Approval. See Agency Approval certificate for more details.

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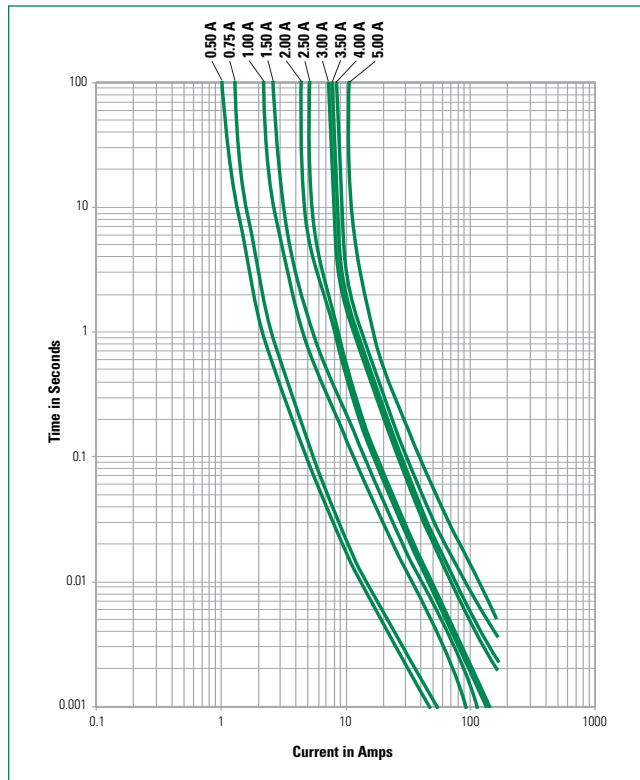
Temperature Re-rating Curve



Note:

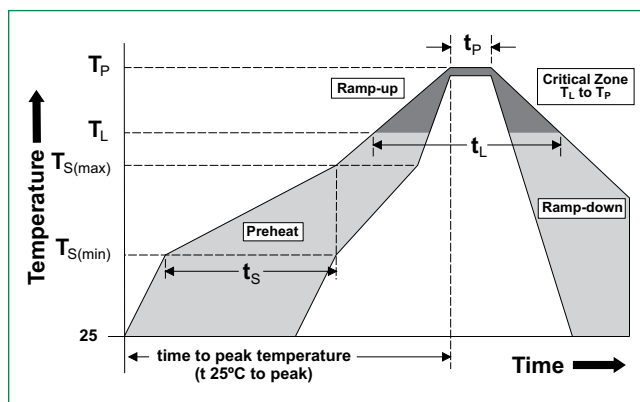
1. Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

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 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 – 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
Wave Soldering Parameters		260°C Peak Temperature, 3 seconds max.



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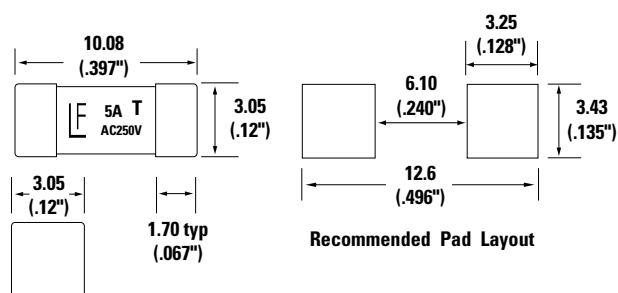
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Product Characteristics

Materials	Body: Ceramic Cap: Silver Plated Brass
Product Marking	Body: Brand Logo, Current Rating Rated Voltage, and T - Characteristic "T"
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 sec at 260°C)
Moisture Sensitivity Level	Level 1 J-STD-020

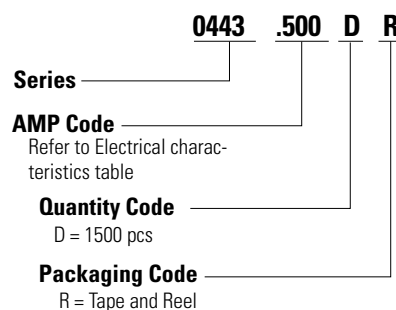
Operating Temperature	-55°C to 125°C
Thermal Shock	MIL-STD-202, Method 107, Test Condition B (5 cycles -65°C to +125°C)
Vibration	MIL-STD-202, Method 201 (10-55 Hz)
Moisture Resistance	MIL-STD-202, Method 106, High Humidity (90-98% RH), Heat (65°C)
Salt Spray	MIL-STD-202, Method 101, Test Condition B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

Dimensions



Note: Dimensions in mm(inches)

Part Numbering System



Example:
1.5 amp product is 0443 **01.5** D R (0.5
amp product shown above).

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
24mm Tape and Reel	EIA-RS 481-2 (IEC 286, part 3)	1500	DR

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