#### Fuse Datasheet

# 443 Series Slo-Blo<sup>®</sup> Fuse

## **Additional Information**





Resources

### **Agency Approvals**

Accessories

Agency	Agency File/Certificate Numbers	Ampere Range		
c 🗫 us	E10480	0.500A - 5.00A		
K	SU05024 -14004 SU05024 -14003 SU05024 -14002	0.500A - 0.750A 1.00A - 2.50A 3.00A - 5.00A		
< PS E	NBK290416-JP1021	1.00A – 5.00A		
$\triangle$	R50310551	0.500A - 5.00A		
(€	N/A	0.500A - 5.00A		
UK CA	N/A	0.500A - 5.00A		

# **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

# **Applications**

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

- 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
- Lighting System
- LED Lighting

#### **Electrical Characteristics for Series**

% of Ampere Rating	<b>Opening Time</b>
100%	4 hours, Minimum
250%	120 seconds, Maximum

#### **Electrical Specifications by Item**

Ampere	Amp	Max	Interrupting	Nominal Cold	Nominal	Nominal		Agency Approvals		s		
Rating (A)	Code	Voltage Rating (V)	Rating⁴	Resistance (Ohms)	l <sup>2</sup> t (A <sup>2</sup> sec)	Melting Voltage Drop I <sup>2</sup> t (A <sup>2</sup> sec) (mV)	Œ	UK CA	c <b>W</b> us	Š	PS	$\triangle$
0.50	.500	250		0.600	1.61	448	х	х	х	х	-	х
0.75	.750	250		0.275	3.025	285	х	х	х	х	-	х
1	001.	250		0.180	10.17	234	х	х	х	х	х	х
1.50	01.5	250		0.100	14.72	196	х	х	х	х	х	х
2	002.	250	50A@250VAC 100A@125VDC	0.052	18.06	154	х	х	х	х	х	х
2.50	02.5	250	500A@60VDC	0.035	18.13	139	х	х	х	х	х	х
3	003.	250	JUUAGUUIDC	0.028	51.44	113	х	х	х	х	х	х
3.50	03.5	250		0.019	53.14	98	х	х	х	х	х	х
4	004.	250		0.016	122.5	81	х	х	х	х	х	х
5	005.	250		0.0115	180.6	80	х	х	х	х	х	х

Notes:

Downloaded from Arrow.com.

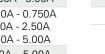
1. Cold resistance measured at less than 10% of rated current at 23°C.

2. Agency Approval Table Key: X=Approved or Certified, P=Pending and Blank=Not Approved

Have special electrical characteristic needs? Contact Littlfuse to learn more about application specific options.
Interrupting Rating may differ based on Agency Approval. See Agency Approval certificate for more details.

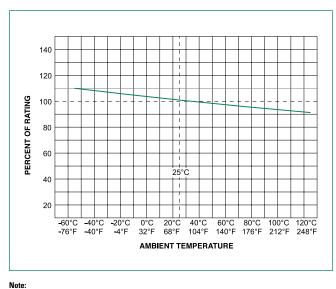


1



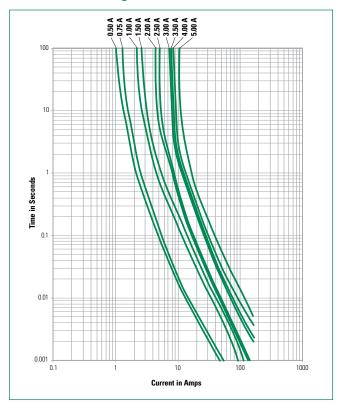
Samples

#### Fuse Datasheet



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

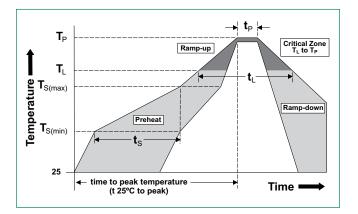
#### Temperature Re-rating Curve



#### Average Time Current Curves

# Soldering Parameters

Reflow Condition			Pb – Free assembly		
Pre Heat	- Temperature	150°C			
	- Temperature	200°C			
	-Time (Min to I	60 - 180 secs			
Average ran	np up rate (Liqui	5°C/second max.			
T <sub>S(max)</sub> to T <sub>L</sub> - Ramp-up Rate			5°C/second max.		
	- Temperature (T <sub>L</sub> ) (Liquidus)		217°C		
Reflow	- Temperature (	60 – 150 seconds			
Peak Temperature (T <sub>P</sub> )			260 <sup>+0/-5</sup> °C		
Time within 5°C of actual peak Temperature (t <sub>p</sub> )			20 – 40 seconds		
Ramp-down Rate			5°C/second max.		
Time 25°C to peak Temperature (T <sub>P</sub> )			8 minutes max.		
Do not exceed			260°C		
Wave Solde	Wave Soldering Parameters 260°C Peak Temperature, 3 seconds max.				



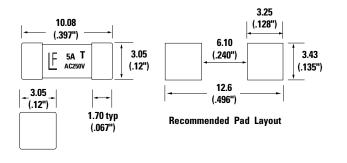
#### Fuse Datasheet

## **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		

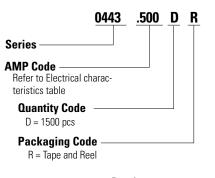
Operating Temperature	–55°C to 125°C			
Thermal Shock	MIL-STD-202, Method 107, Test Condition B (5 cycles -65°C to +125°C)			
Vibration	MIL-STD-202, Method 201 (10-55 Hz)			
Moisture Resistance	MIL-STD-202, Method 106, High Humidity (90-98%RH), Heat (65°C)			
Salt Spray	MIL-STD-202, Method 101, Test 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 <u>01.5</u> D R (0.5 amp product shown above).

#### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
24mm Tape and Reel	EIA-481 IEC 60286-3	1500	DR

Disclaimer Notice - Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall be deemed void for any claims or damages arising out of products used in applications not expressly is to Littelfuse documentation. Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse. 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.



Downloaded from Arrow.com.