313/315 Series Lead-Free 3AG, Slo-Blo® Fuse





Agency Approvals

Agency	Agency File Number	Ampere Range
(l)	E10480	0.010A - 10A**
⊕ .	29862	0.010A - 10A**/15A**
71	E10480	10A - 30A
Pg E	313 Series (Cartridge): NBK060618-E10480A NBK060618-E10480C	1-5A 6.25- 10A**
	315 Series (Leaded): NBK060618-E10480B NBK060618-E10480D	1-5A 6.25-10A**
	SU05001-6004 SU05001-5007 SU05001-5008 SU05001-5009	2.25-2.5A 2.8A - 3.2A 4A - 6.3A 7A-8A
Œ	N/A	0.010A - 10A**

^{**} See note under Electrical Characteristics by item

Description

The 3AG Slo-Blo® fuse solves a broad range of application requirements while offering reliable performance and cost-effective circuit protection.

The fuse catalog number with the suffix "ID" instantly identifies itself upon opening by showing a discoloration of its glass body. Guesswork and time consuming circuit testing are eliminated. This unique design offers the same quality performance characteristics as the standard 3AG Slo-Blo® Fuse design.

Features

- Conforms to UL/CSA/ NMX 248-1 and UL/CSA/ NMX 248-14
- Available in cartridge and axial lead format and with various forming dimensions
- RoHS compliant and Lead-free
- Conforms to DENAN's Appendix 3

Applications

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

Additional Information



Datasheet 313 Series



Datasheet 315 Series



Resources 313 Series



Resources 315 Series



Samples 313 Series



Samples 315 Series



Accessories 313 & 315 Series

Electrical Characteristics by Series

% of Ampere Rating	Ampere Rating	Opening Time		
100%	10mA – 30A	4 hours, Minimum		
135%	10mA – 30A	1 hour, Maximum		
200%	10mA – 15A 5 sec., Min.,30 se			
200%	20A – 30A	5 sec., Min.,60 sec Max		

For recommended fuse accessories for this product series, see 'Recommended Accessories' section.

Axial Lead & Cartridge Fuses 3AG > Slo-Blo® Fuse > 313/315 Series

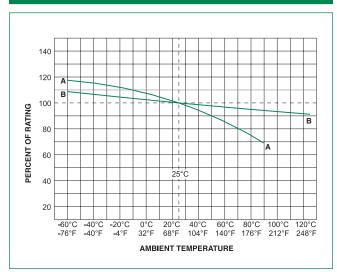
Electrical Characteristic Specifications by Item

	Ampere	Voltage		Nominal Cold	Nominal		Agency Approvals				
	Rating	ng Rating	Interrupting Rating	Resistance (Ohms)	Melting I ² t (A ² sec)	(ÎT)	(3)		W.	PS E	Œ
.010	0.01	250		4300.0000	0.000121	Х	Х	-	-	-	Х
.031	0.031	250		430.0000	0.00303	Х	Х	-	-	-	X
.040	0.04	250		300.0000	0.00630	Х	Х	-	-	-	X
.062	0.062	250		120.0000	0.0210	Х	×	-	-	-	Х
.100	0.1	250		43.0000	0.0850	Х	X	-	-	-	Х
.125	0.125	250		30.0000	0.152	Х	×	-	-	-	Х
.150	0.15	250		20.0000	0.270	Х	×	-	-	-	Х
.175	0.175	250		8.6700	0.177	Х	×	-	-	-	X
.187	0.187	250		8.0100	0.230	Х	×	-	-	-	Х
.200	0.2	250	35A@250Vac	6.5900	0.270	X	×	-	-	-	X
.250	0.25	250	10KA@125Vac	4.2700	0.385	Х	×	-	-	-	Х
.300	0.3	250	-	3.1350	0.730	Х	×	-	-	-	Х
.375	0.375	250		2.0950	1.23	Х	×	-	-	-	Х
.400	0.4	250		1.8750	1.35	Х	×	-	-	-	Х
.500*	0.5	250	-	1.2600	2.55	Х	×	-	-	-	Х
.600	0.6	250		0.9120	4.00	Х	×	-	-	-	Х
.700	0.7	250		0.7000	5.90	Х	×	-	-	-	Х
.750	0.75	250		0.6215	7.16	Х	×	-	-	-	Х
.800	0.8	250		0.5540	8.00	Х	X	-	-	-	Х
001.*	1	250		0.3750	14.0	Х	×	-	-	×	Х
01.2	1.2	250		0.2780	21.5	Х	Х	-	-	X	Х
1.25	1.25	250		0.2600	24.0	Х	×	-	-	×	X
01.5*	1.5	250		0.1910	38.0	Х	Х	-	-	X	Х
01.6	1.6	250		0.1710	49.6	Х	X	-	-	×	Х
01.8	1.8	250		0.1410	92.0	Х	Х	-	-	X	Х
002.*	2	250	100A@250Vac	0.1169	77.0	X	X	-	-	×	Х
2.25	2.25	250	10KA@125Vac	0.0968	121	Х	X	X	-	X	Х
02.5	2.5	250		0.0811	199	X	X	X	-	×	X
02.8	2.8	250		0.0675	269	Х	X	X	-	X	Х
003.*	3	250		0.0593	200	X	X	X	-	X	X
03.2	3.2	250	1	0.0529	209	X	X	X	-	X	X
004.*	4	250		0.0311	76.1	X	X	X	-	X	X
005.*	5	250		0.0214	276	X	X	X	-	X	X
6.25*	6.25	250	000405551	0.0154	388	X	X	X	-	X	X
06.3	6.3	250	200A@250Vac	0.0154	388	X	X	X	-	X	X
00.5	7	250	10KA@125Vac	0.0128	547	X	X	X	-	X	X
008.*	8	250		0.0111	701	X	X	X	-	X	X
010.**	10	250		0.0083	1285	X	X	-	-	X	X
010.*	10	32		0.0083	1285	-	-	-	X	-	-
012.	12	32		0.0065	1200	-	-	-	X	-	-
015.	15	32	1	0.0050	2650	-	-	-	X	-	-
020.	20	32	300A@32Vac	0.0022	9560	-	-	-	X	-	-
025.	25	32	1	0.0017	16500	-	-	-	X	-	-
030.	30	32		0.0012	26900	_	_	_	X	-	_

^{*} For 313 series, these ratings available with an indicating option. Add the "ID" designation to the series number. i.e. 313.500ID.

^{**} The 10A is designed for special voltage requirement. Available as 250Vac rated and the part number is 0313010.MX250P

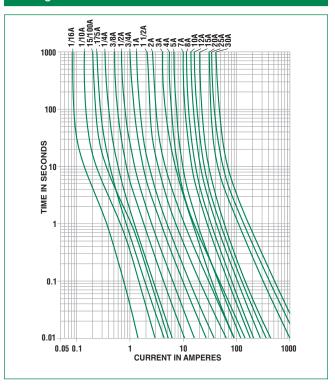
Temperature Re-rating Curve



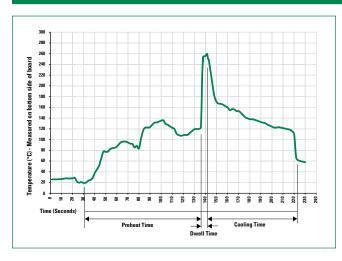
A - For 313/315 Series, from 10mA to 150mA B - For all other ampere ratings of 313/315 series

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

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.

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width			
313 Series							
Bulk	N/A	1000	MX	N/A			
Bulk	N/A	100	HX	N/A			
315 Series							
Bulk	N/A	1000	MX	N/A			
Bulk	N/A	100	HX	N/A			
Bulk	N/A	1000	MXB	N/A			

Axial Lead & Cartridge Fuses 3AG > Slo-Blo® Fuse > 313/315 Series

Product Characteristics

Materials	Body: Glass Cap: Nickel-plated brass Leads: Tin-plated Copper
Terminal Strength	MIL-STD-202, Method 211, Test Condition A
Solderability	MIL-STD-202 method 208
Product Marking	Cap1: Brand logo, current and voltage ratings Cap2: Series and agency approval marks

Operating Temperature	-60°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
Humidity	MIL-STD-202, Method 103, Test Condition A: High RH (95%) and Elevated temperature (40°C) for 240 hours
Salt Spray	MIL- STD-202, Method 101, Test Condition B

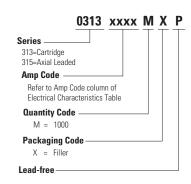
^{*} See Temperature Re-rating Curve

Dimensions

315 000P Series 313 000P Series (cartridge) (axial leaded) 6.35±0.3 6.985±0.3 (.25") (.275") → 31.75±1.12 → 32.72±1.12 (1.25") (1.288")**Axial Lead Diameter: Axial Lead Length:** 0.81±0.05 (.032") for (0.01A - 15A) 38.1±3.15 (1.50") TYP. **Axial Lead Material:** 1.02±0.06 (.040") for Tin-coated copper (20A - 30A)

Measurements displayed in millimeters (inches)

Part Numbering System



Recommended Accessories

Accessory Type	Series	Description	Max Application Voltage	Max Application Amperage
	<u>155100</u>	Twist-Lock In-Line Fuseholder	32	20
Holder	342	Traditional Panel Mount Fuseholder	250	20
noidei	<u>346</u>	Panel Mount Flip-Top Shock-Safe Fuseholder	250	15
	<u>345</u>	Shock-Safe Fuseholder with PC Mount, Solder Mount and Panel Mount options	250	16
Block	<u>354</u>			30
RIOCK	<u>359</u>			30
Clin	<u>122</u>	High Current Traditional PC Board Fuse Clip	1000	30
Clip	<u>101</u>	Rivet/Eyelet Type Fuse Clip	1000	15

- 1. Do not use in applications above rating.
- 2. Please refer to fuseholder data sheet for specific re-rating information.
 3. Please contact factory for applications greater than the max voltage and amperage shown.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Cartridge Fuses category:

Click to view products by Littelfuse manufacturer:

Other Similar products are found below:

5TT3A-R 5TT8A-R MBO-20 MDM-4/10 MDQ-V-15/100 MDX-1-6/10 MDX-2 MDX-3-2/10 MDX-6-1/4 FLSR-15 FLSR-30 FRS-1-1/4 FRS-1-6/10 FRS-4/10 H362003 ABC-2 1/2A AGC-1-1/2RX AGC-15EX AGC-V-3-12-R AGY-50 15019-G MSL-1-1/2 MSL-1-1/4 MSL-1/2 MSL-1/4 MSL-3 MSL-3/4 MSL-4 MSL-5 BK1/C436-2A BK1-GMA-1-6-R BK1-S505-1-R BK1-S506-3-15-R BK/MDM-15 BK/MDM-3/4 S501-V-10A S505-V-500MA SEF-1697-1-002 301030 303030 FLA10 FLA-4/10 FLNR-5 20.0M6.3X32F GBB-17-1/2 301001 301020 311008 313.25