

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



Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	0.010A - 10A **
	29862	0.010A - 10A **/15A **
	E10480	10A - 30A
	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	2.25-2.5A
	SU05001-5007	2.8A - 3.2A
	SU05001-5008	4A - 6.3A
	SU05001-5009	7A-8A
	N/A	0.010A - 10A **

** See note under Electrical Characteristics by item

Additional Information



**Datasheet
313 Series**



**Resources
313 Series**



**Samples
313 Series**



**Accessories
313 & 315 Series**



**Datasheet
315 Series**



**Resources
315 Series**



**Samples
315 Series**

For recommended fuse accessories for this product series, see '[Recommended Accessories](#)' section.

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
- RoHS compliant and Lead-free
- Available in cartridge and axial lead format and with various forming dimensions
- 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.

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 sec., Max
	20A – 30A	5 sec., Min., 60 sec Max

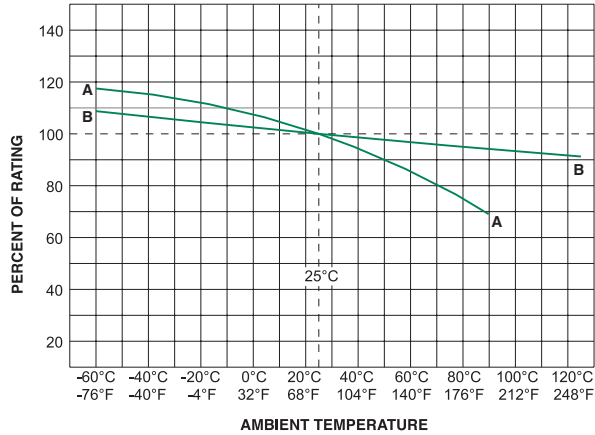
Electrical Characteristic Specifications by Item

Amp Code	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Agency Approvals					
						UL	SP	CCC	RU	PS E	CE
.010	0.01	250	35A@250Vac 10KA@125Vac	4300.0000	0.000121	x	x	-	-	-	x
.031	0.031	250		430.0000	0.00303	x	x	-	-	-	x
.040	0.04	250		300.0000	0.00630	x	x	-	-	-	x
.062	0.062	250		120.0000	0.0210	x	x	-	-	-	x
.100	0.1	250		43.0000	0.0850	x	x	-	-	-	x
.125	0.125	250		30.0000	0.152	x	x	-	-	-	x
.150	0.15	250		20.0000	0.270	x	x	-	-	-	x
.175	0.175	250		8.6700	0.177	x	x	-	-	-	x
.187	0.187	250		8.0100	0.230	x	x	-	-	-	x
.200	0.2	250		6.5900	0.270	x	x	-	-	-	x
.250	0.25	250		4.2700	0.385	x	x	-	-	-	x
.300	0.3	250		3.1350	0.730	x	x	-	-	-	x
.375	0.375	250		2.0950	1.23	x	x	-	-	-	x
.400	0.4	250		1.8750	1.35	x	x	-	-	-	x
.500*	0.5	250		1.2600	2.55	x	x	-	-	-	x
.600	0.6	250		0.9120	4.00	x	x	-	-	-	x
.700	0.7	250		0.7000	5.90	x	x	-	-	-	x
.750	0.75	250		0.6215	7.16	x	x	-	-	-	x
.800	0.8	250		0.5540	8.00	x	x	-	-	-	x
001.*	1	250		0.3750	14.0	x	x	-	-	x	x
01.2	1.2	250	100A@250Vac 10KA@125Vac	0.2780	21.5	x	x	-	-	x	x
1.25	1.25	250		0.2600	24.0	x	x	-	-	x	x
01.5*	1.5	250		0.1910	38.0	x	x	-	-	x	x
01.6	1.6	250		0.1710	49.6	x	x	-	-	x	x
01.8	1.8	250		0.1410	92.0	x	x	-	-	x	x
002.*	2	250		0.1169	77.0	x	x	-	-	x	x
2.25	2.25	250		0.0968	121	x	x	x	-	x	x
02.5	2.5	250		0.0811	199	x	x	x	-	x	x
02.8	2.8	250		0.0675	269	x	x	x	-	x	x
003.*	3	250		0.0593	200	x	x	x	-	x	x
03.2	3.2	250	200A@250Vac 10KA@125Vac	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		0.0154	388	x	x	x	-	x	x
06.3	6.3	250		0.0154	388	x	x	x	-	x	x
007.*	7	250		0.0128	547	x	x	x	-	x	x
008.*	8	250	300A@32Vac	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		0.0050	2650	-	-	-	x	-	-
020.	20	32		0.0022	9560	-	-	-	x	-	-
025.	25	32		0.0017	16500	-	-	-	x	-	-
030.	30	32		0.0012	26900	-	-	-	x	-	-

* For 313series, 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

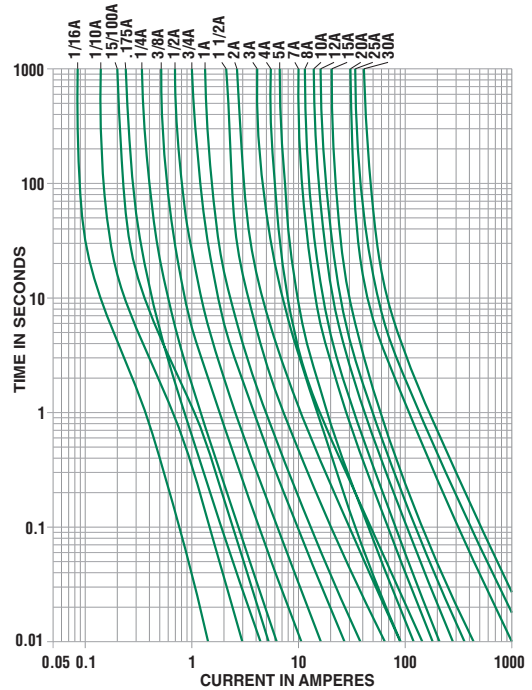
Temperature Re-rating Curve



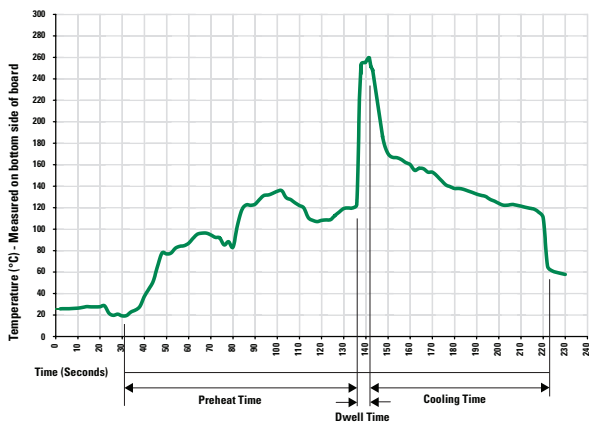
A - For 313/315 Series, from 10mA to 150mA
B - For all other ampere ratings of 313/315 series

Note:
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

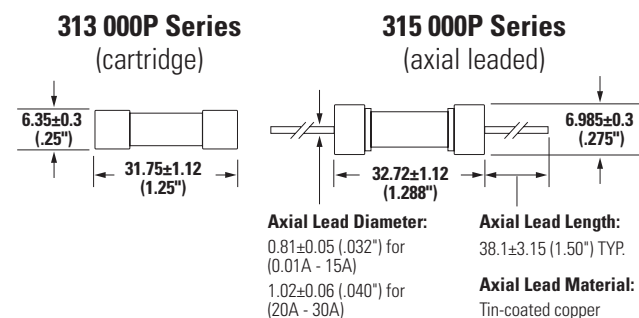
Product Characteristics

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

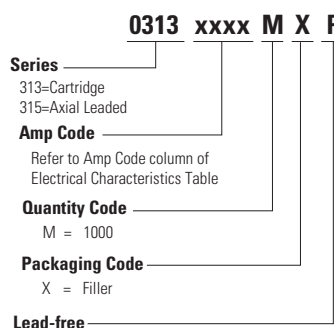
* See Temperature Re-rating Curve

Dimensions



Measurements displayed in millimeters (inches)

Part Numbering System



Recommended Accessories

Accessory Type	Series	Description	Max Application Voltage	Max Application Amperage
Holder	155100	Twist-Lock In-Line Fuseholder	32	20
	342	Traditional Panel Mount Fuseholder	250	20
	346	Panel Mount Flip-Top Shock-Safe Fuseholder	250	15
	345	Shock-Safe Fuseholder with PC Mount, Solder Mount and Panel Mount options	250	16
Block	354	Low Profile OMNI-BLOK® Fuse Block	600	30
	359	High Current Screw Terminal Fuse Block		30
Clip	122	High Current Traditional PC Board Fuse Clip	1000	30
	101	Rivet/Eyelet Type Fuse Clip	1000	15

Notes:

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

Mouser Electronics

Authorized Distributor

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0315020.MXBP	0313.031HXP	0313.040MXP	031506.3MXP	0313.600HXP	0313010.HXP	0313.150HXP
0315010.MXP	0313003.HXP	031301.5HXP	0315008.MXP	031501.8HXP	0313001.HXP	031501.2HXP
0315003.MXP	0315.100MXP	0313.700HXP	0313015.HXP	0315.031HXP	03152.25MXP	031501.5HXP
0313.800MXP	031502.8HXP	0313.100MXP	0313.750MXP	03132.25HXP	0313.010MXP	031302.8MXP
0313025.HXP	0315.200MXP	0313015.MXP	031502.5MXP	0315.800HXP	0315012.MXP	0313003.MXP
03156.25MXP	0315010.HXP	0313.400HXP	0315.150MXP	0315015.HXP	0315.250MXP	0315.150HXP
0315003.HXP	0313.150MXP	0313020.HXP	0315.300MXP	0315.700MXP	0313.125MXP	0313.375MXP
0315.500MXP	0313.100HXP	031306.3MXP	0315020.HXP	031503.2HXP	03152.25HXP	0315030.HXP
031501.2MXP	031501.6HXP	0313012.HXP	0315001.MXP	0313.175HXP	0315.062HXP	0313.300HXP
0315.700HXP	031302.5MXP	0313.031MXP	0315007.HXP	031301.8MXP	0315.010MXP	0313007.MXP
031301.8HXP	031503.2MXP	0313.500HXP	031502.5HXP	0315.375MXP	0315004.MXP	0313010.MX250P
0313.125HXP	0315.600MXP	0313.800HXP	0313004.HXP	03136.25MXP	0315.040HXP	0313020.MXP
0315004.HXP	0313025.MXP	03132.25MXP	0315.040MXP	03151.25MXP	0315.375HXP	0313.200MXP
0313.750HXP	031301.2MXP	031301.5MXP	03156.25HXP	0315002.MXP	0313.200HXP	0315.600HXP
031302.8HXP	031303.2MXP					