Axial Lead & Cartridge Fuses

3AG > Slo-Blo[®] Fuse > 313/315 Series





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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

- In accordance with UL Standard 248-14
- RoHS compliant and Lead-free
- Available in cartridge and axial lead format and with various forming dimensions

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	OpeningTime
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



Agency Approvals

Agency	Agency File Number	Ampere Range
(UL	E10480	0.010A - 10A**
(C)P	29862	0.010A - 10A**/15A**
A L	E10480	10A - 30A
^	313 Series (Cartridge): NBK040205-E10480B NBK040205-E10480D	1-5A 6.25- 10A**
PS	315 Series (Leaded): NBK040205-E10480F NBK040205-E01480H NBK280906-JP1021	1-5A 6.25-10A** 15**
M	SU05001-6004 SU05001-5007 SU05001-5008 SU05001-5009	2.25-2.5A 2.8A - 3.2A 4A - 6.3A 7A-8A
(€	N/A	0.010A - 10A**/15A**

** See note under Electrical Characteristics by item

Additional Information						
Datasheet 313 Series	Resources 313 Series	Samples 313 Series	1			
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Datasheet 315 Series	Resources 315 Series	Samples 315 Series	Accessories 313 & 315 Series			
For recommende	d fuse accessori	as for this produ	ct series			

For recommended fuse accessories for this product series, see '<u>Recommended Accessories</u>' section.



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Electric	Electrical Characteristic Specifications by Item										
				Nominal				Agency A	Approvals		
Amp Code	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Cold Resistance (Ohms)	Nominal Melting I²t (A² sec)	(YL)	()	IC .	A7	P S B B B B B B B B B B	Œ
.010	0.01	250		4300.0000	0.000121	х	x				х
.031	0.031	250		430.0000	0.00303	х	x				х
.040	0.04	250		300.0000	0.00630	х	x				х
.062	0.062	250		120.0000	0.0210	х	x				х
.100	0.1	250		43.0000	0.0850	х	x				х
.125	0.125	250		30.0000	0.152	х	x				х
.150	0.15	250		20.0000	0.270	х	x				х
.175	0.175	250		8.6700	0.177	х	x				х
.187	0.187	250		8.0100	0.230	х	x				х
.200	0.2	250	35A@250Vac	6.5900	0.270	х	x				х
.250	0.25	250	10KA@125Vac	4.2700	0.385	х	x				х
.300	0.3	250		3.1350	0.730	х	x				х
.375	0.375	250		2.0950	1.23	х	x				х
.400	0.4	250		1.8750	1.35	х	x				х
.500*	0.5	250		1.2600	2.55	х	x				х
.600	0.6	250		0.9120	4.00	х	x				х
.700	0.7	250		0.7000	5.90	х	x				х
.750	0.75	250		0.6215	7.16	х	x				х
.800	0.8	250		0.5540	8.00	х	x				х
001.*	1	250		0.3750	14.0	х	x			x	х
01.2	1.2	250		0.2780	21.5	х	x			x	х
1.25	1.25	250]	0.2600	24.0	х	x			x	х
01.5*	1.5	250		0.1910	38.0	х	x			х	х
01.6	1.6	250]	0.1710	49.6	х	x			х	х
01.8	1.8	250	100000000	0.1410	92.0	х	x			x	х
002.*	2	250	100A@250Vac 10KA@125Vac	0.1169	77.0	х	x			х	х
2.25	2.25	250		0.0968	121	х	x	x		x	х
02.5	2.5	250		0.0811	199	х	x	x		х	х
02.8	2.8	250]	0.0675	269	х	x	x		x	х
003.*	3	250		0.0593	200	х	x	x		х	х
03.2	3.2	250		0.0529	209	х	x	x		х	х
004.*	4	250		0.0311	76.1	х	x	x		x	х
005.*	5	250		0.0214	276	х	x	x		х	х
6.25*	6.25	250	0004 60501	0.0154	388	х	x	x		x	х
06.3	6.3	250	200A@250Vac 10KA@125Vac	0.0154	388	х	x	x		x	х
007.*	7	250	1010 (@ 120 / 40	0.0128	547	х	x	x		x	х
008.*	8	250	-	0.0111	701	х	x	x		х	х
010.**	10	250		0.0083	1285	х	x			х	х
010.*	10	32		0.0083	1285				x		
012.	12	32]	0.0065	1200				x		
015.**	15	125		0.0050	2650		x		x	x	х
015.	15	32	300A@32Vac	0.0050	2650				x		
020.	20	32]	0.0022	9560				x		
025.	25	32		0.0017	16500				x		
030.	30	32	1	0.0012	26900				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.
** These 2 ratings are designed for special voltage requirement. For 10A, it is available as 250Vac rated and the part number is 0313010.MX250P; For 15A, it is available as 125Vac rated and the part number is 0315015.MX125P.

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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.



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

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Product Characteristics

Dimensions

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	–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
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

0313 xxxx M X P

Part Numbering System

Series Amp Code

Quantity Code

M = 1000

Lead-free

Packaging Code X = Filler

Refer to Amp Code column of

Electrical Characteristics Table



Recommended Accessories

Accessory Type	Series	Description		Max Application Amperage
	<u>155100</u>	Twist-Lock In-Line Fuseholder	32	20
342		Traditional Panel Mount Fuseholder	250	20
Holder <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
Disali	<u>354</u>	Low Profile OMNI-BLOK® Fuse Block	600	30
Block <u>359</u>		High Current Screw Terminal Fuse Block	600	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

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.

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