

# 325/326 Series Lead-Free 3AB, Slo-Blo® Fuse



#### **Agency Approvals**

Agency	Agency File Number	Ampere Range
(JL)	E10480	0.250A - 10A
<b>91</b>	E10480	12A - 30A
(Sft )	29862	0.250A - 30A
	Cartridge: NBK 030805-E10480A NBK 030805-E10480C NBK 030805-E10480C NBK 260106-JP1021A Leaded: NBK 030805-E10480B NBK 030805-E10480D NBK 030805-E10480F NBK 260106-JP1021B	1A-3.2A 4A-5A 6.25A-15A 20A-30A 1A-3.2A 4A-5A 6.25A-15A 20A-30A
M	SU05001-5010 SU05001-5011 SU05001-5012 SU05001-6006 SU05001-6007	7-10A 12A, 15A 20A 2.8A-3.2A 2.5A
$\triangle$	T 50239752 01	*12A/*15A/*20A
(€	N/A	0.010A - 30A

\* Approved for cartridge version only

#### Description

The 3AB Slo-Blo® Fuse with ceramic body construction permits higher interrupting ratings and voltage ratings. Ideal for applications where high current loads are expected.

#### Features

- In accordance with UL Standard 248-14
- RoHS compliant and Lead-free

RHS @ [ U G AL C ( A

• 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 for Series**

% of Ampere Rating Ampere Rating		Opening Time
100%	0.010A – 30A	4 hours, Minimum
135%	0.010A – 30A	1 hour, Maximum
200%	0.010A – 3.2A	5 sec., Min., 30 sec., Max.
200%	4A – 30A	5 sec., Min., 60 sec., Max.

#### Additional Information



Datasheet

325 Series

**↓** 

326 Series

Resources 325 Series





326 Series



Samples



Accessories

325 Series

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



# **Axial Lead & Cartridge Fuses**

3AB > Slo-Blo<sup>®</sup> Fuse > 325/326 Series

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

	Ampere	Voltage	Voltage	Nominal Cold	Nominal Cold Nominal	Agency Approvals						
Amp Code		Interrupting Rating	Resistance (Ohms) I	Melting I²t (A² sec)	PS E	71	<b>(</b>	(UL)	Œ	4	ß	
.010	0.01	250		3324.8000	0.00013					х		
.031	0.031	250		332.5000	0.0110					х		
.062	0.062	250		91.7000	0.0276					х		
.100	0.1	250		33.5500	0.0870					x		
.125	0.125	250	100A@250Vac	22.4500	0.100					х		
.150	0.15	250		15.4500	0.143					х		
.175	0.175	250		8.9200	0.350					х		
.187	0.187	250		7.7250	0.330					x		
.200	0.2	250		6.7700	0.316					x		
.250	0.25	250		4.4300	0.804			x	x	x		
.300	0.3	250		3.2200	1.230			x	x	x		
.375	0.375	250		2.1550	1.200			x	x	x		
.400	0.4	250		1.9350	1.33	_		x	x	x		
.500	0.4	250		1.3000	4.80			X	x	x		
.600	0.6	250		0.9495	3.90			X	x	x		
.700	0.0	250		0.7215	6.42							
.750	0.75	250		0.6410	13.00			X	X	X		
.750	0.75	250	100A@250Vac	0.5725	8.20			X	X	X		
.800	1	250	10KA@125Vac	0.3890	16.3			X	X	x		
	1.2	250	10KA@125Vdc			X		X	X	X		
01.2				0.2860	22.0	X		X	X	x		
1.25	1.25	250		0.2680	40.0	X		X	X	х		
01.5	1.5	250		0.1975	59.7	X		X	X	х		
01.6	1.6	250		0.1760	66.0	X		X	Х	х		
002.	2	250		0.1210	118.0	X		Х	Х	х		
02.5	2.5	250		0.0835	185.0	X		Х	X	Х		X
02.8	2.8	250		0.0695	232.0	X		Х	Х	Х		X
003.	3	250		0.0605	200.0	Х		Х	Х	Х		Х
03.2	3.2	250	100A@250Vac 10KA@125Vac	0.0539	214.0	x		x	x	x		x
004.	4	250		0.0761	9.71	х		х	х	х		
005.	5	250		0.0522	25.0	X		х	х	х		
6.25	6.25	250	400A@250Vac	0.0346	60.4	Х		х	х	х		
007.	7	250	10KA@125Vac	0.0227	47.3	X		х	х	х		x
008.	8	250	10KA@125Vdc	0.0193	67.1	Х		х	х	х		X
010.	10	250		0.0132	137	X		x	х	х		x
012.	12	250	400A@250Vac 10KA@125Vac 600A@125Vdc	0.0067	129	x	x	x		x	x***	x
012.*	12	250	1500A@250Vac	0.0011	618		х	х		х		
015.	15	250	400A@250Vac 10KA@125Vac 600A@125Vdc	0.0050	245	x	x	x		x	x***	x
015.*	15	250	1500A@250Vac	0.0083	760		х	х		x		
020.	20	250	400A@250Vac 10KA@125Vac 600A@125Vdc	0.0034	575	x	x	x		x	x***	x
020.*	20	250	1500A@250Vac	0.0042	2500		х	х		х		
025.**	25	250	1500A@250Vac	0.0032	4682		х			х		
025.	25	250	400A@250Vac 10KA@60Vdc	0.0024	1030	x	х	x		х		
030.	30	250	600A@125Vdc	0.0019	1690	x	x	x		x		

\*Higher i²t version available. Please add suffix "D" to part numbers. For instance, 0325020.MXDP, 0326020.MXDP I<sup>2</sup>t test at 10x rated current. \*\*Higher I<sup>2</sup>t version available. Please add suffix "W" to part numbers. For instance, 0325025.MXWP \*\*\*Approved for cartridge versions only, and interrupting rating is 400A@125Vac and 400A@250Vac



# **Axial Lead & Cartridge Fuses**

3AB > Slo-Blo<sup>®</sup> Fuse > 325/326 Series

# **Temperature Re-rating Curve** 140 120

Note:

PERCENT OF RATING

100

80 60

40

20

-60°C -40°C -76°F -40°F

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

0°C

-20°C

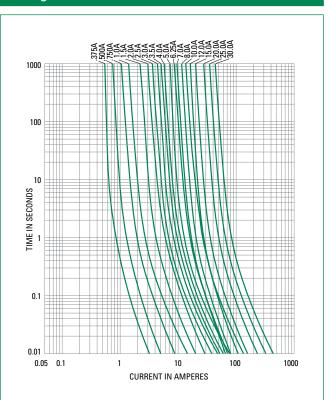
-4°F 32°F 25°0

1

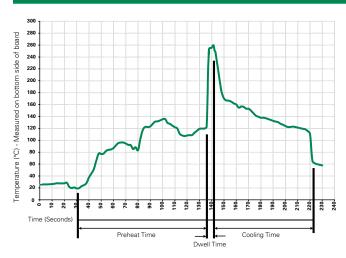
AMBIENT TEMPERATURE

20°C 40°C 60°C 80°C 100°C 120°C 68°F 104°F 140°F 176°F 212°F 248°F

#### **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.** 



## **Axial Lead & Cartridge Fuses** 3AB > Slo-Blo<sup>®</sup> Fuse > 325/326 Series

#### **Product Characteristics**

Materials	Body: Ceramic 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 Morking	Cap1:	Brand logo, current and voltage ratings	
Product Marking	Cap2:	Series and agency approval marks	

325 000P Series

(axial leaded)

- 32.72±1.12 (1.288")

Axial Lead Diameter:

0.81±0.05 (.032") for

1.02±0.06 (.040") for (20A - 30A)

(0.01A - 15A)

6.985±0.3 (.275")

Axial Lead Length:

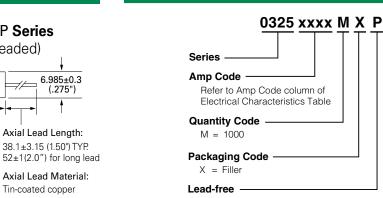
38.1±3.15 (1.50") TYP.

Axial Lead Material:

Tin-coated copper

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

#### Part Numbering System



6.35±0.3 (.25")

t

Dimensions

Measurements displayed in millimeters (inches)

326 000P Series

(cartridge)

- 31.75±1.12 → (1.25")

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
		325 Series		
Bulk	N/A	5	VX	N/A
Bulk	N/A	100	HX	N/A
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MX52 (long lead)	N/A
Bulk	N/A	1000	MX52L (long lead)	N/A
Bulk	N/A	1000	MXD	N/A
Bulk	N/A	1000	MXF31	N/A
Bulk	N/A	1000	MXW	N/A
		326 Series		
Bulk	N/A	5	VX	N/A
Bulk	N/A	100	HX	N/A
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXCC	N/A
Bulk	N/A	1000	MXD	N/A



## **Axial Lead & Cartridge Fuses** 3AB > Slo-Blo<sup>®</sup> Fuse > 325/326 Series

### **Recommended Accessories**

Accessory Type	Series	Description	Max Application Voltage	Max Application Amperage
	<u>155100</u>	Twist-Lock In-Line Fuseholder	32	20
Holder 342 346 345	Traditional Panel Mount Fuseholder	250	20	
	<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	20
Block	354 Low Profile OMNI-BLOK® Fuse Block		600	30
359	<u>359</u>	High Current Screw Terminal Fuse Block	000	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: 1. Do not use in applications above rating. 2. Please refer to fuseholder data sheet for specific re-rating information. 3. Please contact Littelfuse for applications greater than the max voltage and amperage shown.