

# Axial Lead and Cartridge Fuses

Designed to IEC Standard

**RoHS** **Pb** **5 x 20 mm** Time Lag Fuse (Slo-Blo®) Fuse 213 Series



- Designed to International (IEC) Standards for use globally.
- Meets the IEC 60127-2, Sheet 3 specification for Time Lag Fuses.
- Available in Cartridge and Axial Lead Form.
- Available in ratings of 0.200 to 6.3 amperes.
- RoHS compliant and Lead-Free version available, add XP suffix to standard catalog number

### ELECTRICAL CHARACTERISTICS (213 Series):

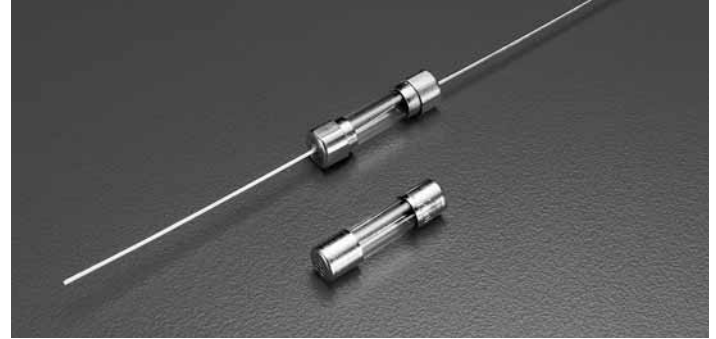
% of Ampere Rating	Ampere Rating	Opening Time
150%	.032–6.3	60 minutes, <b>Minimum</b>
	8 - 15	30 minutes, <b>Minimum</b>
210%	.032–15	2 minutes, <b>Maximum</b>
275%	.032–.100	0.2 sec., <b>Min.</b> ; 10 sec. <b>Max.</b>
	.125–15	0.6 sec., <b>Min.</b> ; 10 sec. <b>Max.</b>
400%	.032–.100	.04 sec., <b>Min.</b> ; 3 sec. <b>Max.</b>
	.125–15	.15 sec., <b>Min.</b> ; 3 sec. <b>Max.</b>
1000%	.032–.100	.01 sec., <b>Min.</b> ; 0.3 sec. <b>Max.</b>
	.125–15	0.02 sec., <b>Min.</b> ; 0.3 sec. <b>Max.</b>

**INTERRUPTING RATINGS:** 35 amperes or 10 x rated current; (whichever is greater) to a maximum 100A @ 250 VAC, unity power factor.

### ORDERING INFORMATION:

RoHS compliant and Lead-Free version available, add XP suffix to standard catalog number

213 Surge Withstand				
Cartridge Catalog Number	Ampere Rating	Voltage Rating	Nominal Resistance Cold Ohms	Nominal Melting Pt A°Sec.
0213.200	.200	250	1.60	0.350
0213.250	.250	250	1.05	0.555
0213.315	.315	250	0.848	1.14
0213.400	.400	250	0.535	1.35
0213.500	.500	250	0.370	2.90
0213.630	.630	250	0.275	4.80
0213.800	.800	250	0.165	9.42
0213 001	1	250	0.117	19.20
0213 1.25	1.25	250	0.081	27.15
0213 01.6	1.6	250	0.055	44.2
0213 002.	2	250	0.044	92.7
0213 02.5	2.5	250	0.030	138.0
0213 3.15	3.15	250	0.022	226.5
0213 004	4	250	0.017	202
0213 005.	5	250	0.011	314
0213 06.3	6.3	250	0.008	600



### ENVIRONMENTAL SPECIFICATIONS:

**Operating temperature:** -55°C to 125°C

**Thermal Shock:** MIL-STD-202F Method 107G, Test Condition B: (5 cycles -65°C to +125°C)

**Vibration:** MIL-STD-202F Method 201A

**Humidity:** MIL-STD-202F Method 103B, Test Condition A. high relative humidity (95%) and elevated temperature (40°C) for 240 hours.

**Salt Spray:** MIL-STD-202F Method 101D, Test Condition B

### PHYSICAL SPECIFICATIONS:

**Material:** Body: Glass

Cap: Nickel Plated Brass

Leads: Tin Plated Copper

**Terminal Strength:** MIL-STD-202F Method 211A, Test Condition A

**Solderability:** Reference IEC 60127 Second Edition 2003-01 Annex A

**Product Marking:** Cap 1: current and voltage rating.  
Cap 2: Agency approval markings.

**Packaging:** Available in Bulk (v=5, H=100, M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel).

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AXIAL LEAD AND  
CARTRIDGE FUSES

# Axial Lead and Cartridge Fuses

Designed to IEC Standard

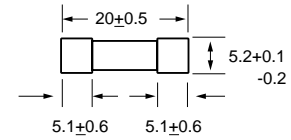
**RoHS** **Pb** **5 x 20 mm** Time Lag Fuse (Slo-Blo®) Fuse 213 Series



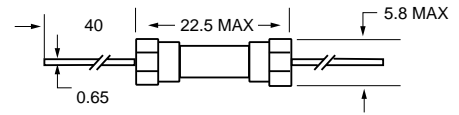
## Agency Approvals

Agency Approvals		Ampere Range
	Certificate No. Cartridge NBK120802-E10480 A&C Leaded NBK120802-E10480 B&D	1A – 6.3A
	Certificate No. 2002010207007597 2003010207045592	200mA – 6.3A 5A
	Recognised File No. E10480 Guide No. JDYX2	200mA – 6.3A
	File No. 029862 Acc. Class No. LR1422-30	
	Licence No. KM41462	
	File No. 9905092, 9923025, 304515	

**0213 000<sup>2</sup>**



**0213 000 XE<sup>1</sup>**



All dimensions in mm

- Notes:
- \* Ratings above 6.3A have 0.8 mm dia lead
  - 1 For RoHS compliant parts replace XE with XEP
  - 2 For RoHS compliant parts add suffix 'XP'

## Average Time Current Curves



# Axial Lead and Cartridge Fuses

Designed to IEC Standard

RoHS 5 x 20 mm Time Lag Fuse (Slo-Blo®) Fuse 218 Series



- Designed to International (IEC) Standards for use globally.
- Meets the IEC 60127-2, Sheet 3 specification for Time Lag Fuses.
- Available in Cartridge and Axial Lead Form.
- Available in ratings of 0.032 to 15 amperes.
- RoHS compliant and Lead-Free version available, add XP suffix to standard catalog number

### ELECTRICAL CHARACTERISTICS (218 Series):

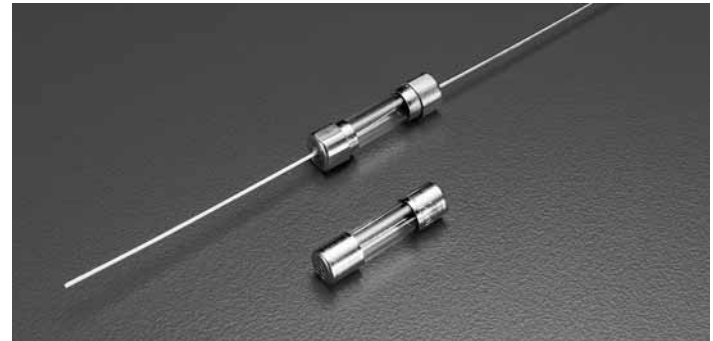
% of Ampere Rating	Ampere Rating	Opening Time
150%	.032–6.3	60 minutes, <b>Minimum</b>
	8 - 15	30 minutes, <b>Minimum</b>
210%	.032–15	2 minutes, <b>Maximum</b>
275%	.032–.100	0.2 sec., <b>Min.</b> ; 10 sec. <b>Max.</b>
	.125–15	0.6 sec., <b>Min.</b> ; 10 sec. <b>Max.</b>
400%	.032–.100	.04 sec., <b>Min.</b> ; 3 sec. <b>Max.</b>
	.125–15	.15 sec., <b>Min.</b> ; 3 sec. <b>Max.</b>
1000%	.032–.100	.01 sec., <b>Min.</b> ; 0.3 sec. <b>Max.</b>
	.125–15	0.02 sec., <b>Min.</b> ; 0.3 sec. <b>Max.</b>

**INTERRUPTING RATINGS:** 35 amperes or 10 x rated current; (whichever is greater) to a maximum 100A @ 250 VAC, unity power factor.

### ORDERING INFORMATION:

RoHS compliant and Lead-Free version available, add XP suffix to standard catalog number

218				
Cartridge Catalog Number	Ampere Rating	Voltage Rating	Nominal Resistance Cold Ohms	Nominal Melting I <sup>2</sup> t A <sup>2</sup> Sec.
218.032	.032	250	58.45	0.00305
218.040	.040	250	35.70	0.0055
218.050	.050	250	23.30	0.0071
218.063	.063	250	18.1	0.012
218.080	.080	250	12.6	0.0265
218.100	.100	250	8.95	0.0495
218.125	.125	250	4.41	0.150
218.160	.160	250	2.44	0.225
218.200	.200	250	1.60	0.350
218.250	.250	250	1.05	0.555
218.315	.315	250	0.848	1.14
218.400	.400	250	0.535	1.35
218.500	.500	250	0.370	2.90
218.630	.630	250	0.275	4.80
218.800	.800	250	0.073	1.99
218 001	1	250	0.055	3.33
218 1.25	1.25	250	0.042	5.80
218 01.6	1.6	250	0.032	10.61
218 002	2	250	0.029	14.80
218 02.5	2.5	250	0.022	23.85
218 3.15	3.15	250	0.017	39.20
218 004	4	250	0.013	70.95
218 005	5	250	0.010	114.0
218 06.3	6.3	250	0.0075	204.0
218 008	8	250	0.0059	350.5
218 010	10	250	0.0045	583.0
218 015	15	250	0.0030	1441.0



### ENVIRONMENTAL SPECIFICATIONS:

**Operating temperature:** -55°C to 125°C

**Thermal Shock:** MIL-STD-202F Method 107G, Test Condition B: (5 cycles -65°C to +125°C)

**Vibration:** MIL-STD-202F Method 201A

**Humidity:** MIL-STD-202F Method 103B, Test Condition A. high relative humidity (95%) and elevated temperature (40°C) for 240 hours.

**Salt Spray:** MIL-STD-202F Method 101D, Test Condition B

### PHYSICAL SPECIFICATIONS:

**Material:** Body: Glass

Cap: Nickel Plated Brass

Leads: Tin Plated Copper

**Terminal Strength:** MIL-STD-202F Method 211A, Test Condition A

**Solderability:** Reference IEC 60127 Second Edition 2003-01 Annex A

**Terminal strength:** MIL-STD-202F Method 211A, Test Condition A

**Product Marking:** Cap 1: current and voltage rating.  
Cap 2: Agency approval markings.

**Packaging:** Available in Bulk (v=5, H=100, M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel).

# Axial Lead and Cartridge Fuses

Designed to IEC Standard

**RoHS** **Pb** **5 x 20 mm** Time Lag Fuse (Slo-Blo®) Fuse 218 Series

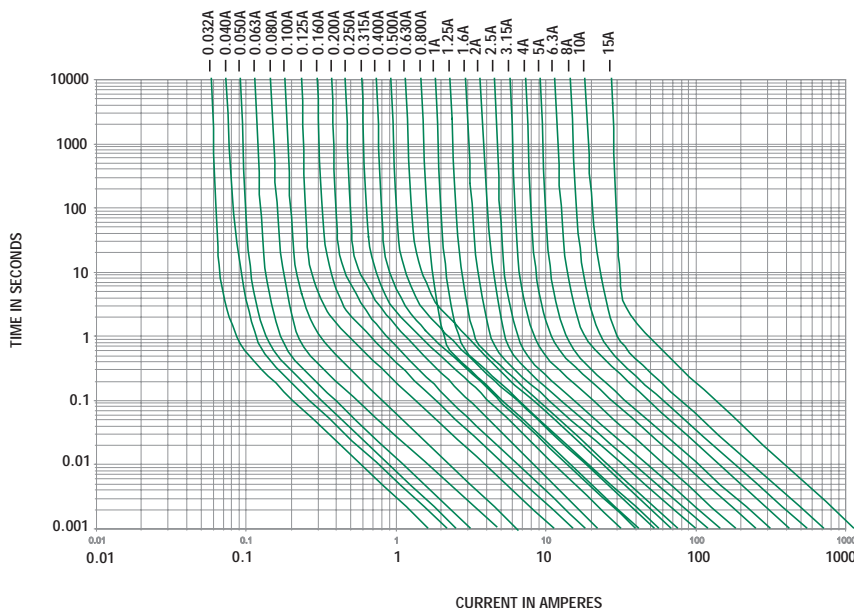


## Agency Approvals

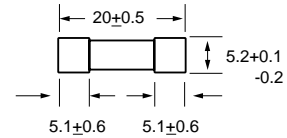
Agency Approvals		Ampere Range
	Certificate No. Cartridge NBK120802-E10480 A&C Leaded NBK120802-E10480 B&D	1A – 15A
	Certificate No. 2002010207007596	32mA – 6.3A
	Certificate No. SU05001-3005 SU05001-2008 SU05001-2009	32mA – 40mA 50mA – 800mA 1A – 10A
	Recognised File No. E10480 Guide No. JDYX2	32mA – 15A
	File No. 029862 Acc. Class No. LR1422-30	
	Licence No. KM41462	80mA – 6.3A
	File No. 9850004, 9840179, 9446070, 9708209, 9843043, 312377 & 304650	32mA – 6.3A
		32mA – 15A

Note: 8A and 10A are under consideration by IEC(125V).

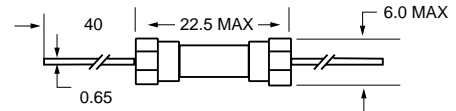
## Average Time Current Curves



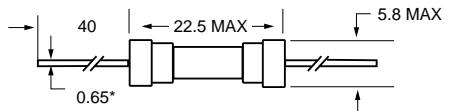
**0218 000<sup>2</sup>**



**0218.032 XE<sup>1</sup>**  
to  
**0218.100XE<sup>1</sup>**



**0218.125 XE<sup>1</sup>**  
to  
**0218015. XE<sup>1</sup>**



All dimensions in mm

Notes:  
\* Ratings above 6.3A have 0.8 mm dia lead  
1 For RoHS compliant parts replace XE with XEP  
2 For RoHS compliant parts add suffix 'XP'