

# Axial Lead and Cartridge Fuses

Designed to UL/CSA Standards

**RoHS**  **5 x 20 mm** Medium-Acting Fuse 233 Series



- Designed to UL/ CSA/ANCE 248 Standard.
- Available in Cartridge, Axial and Radial Lead Format.
- Available in ratings of 1A to 10A.
- RoHS compliant and Lead-Free version available, add XP suffix to standard catalog number

## ELECTRICAL CHARACTERISTICS:

| % of Ampere Rating | Ampere Rating | Opening Time                                |
|--------------------|---------------|---|
| 100%               | 1–3.5         | 4 hours, <b>Minimum</b>                     |
|                    | 4–10          | 1 hour, <b>Minimum</b>                      |
| 135%               | 1–10          | 3 sec., <b>Min.</b> ; 1 hour <b>Max.</b>    |
| 200%               | 1–10          | 0.4 sec., <b>Min.</b> ; 4 sec., <b>Max.</b> |

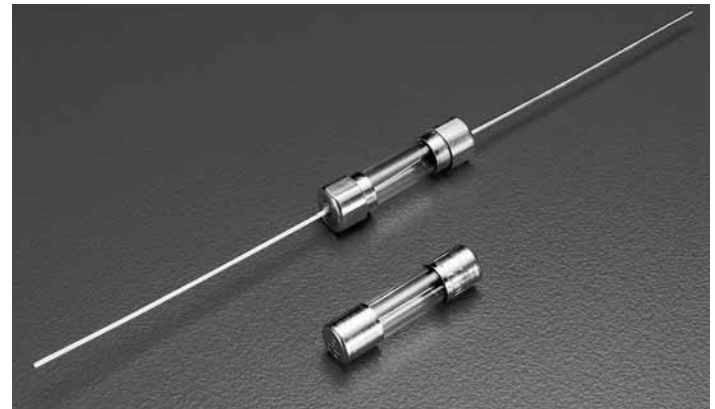
## INTERRUPTING RATING:

10,000 amperes at 125 VAC, 0.7-0.8 power factor

## ORDERING INFORMATION:

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

| Catalog Number | Ampere Rating | Voltage Rating | Nominal Resistance Cold Ohms | Nominal Melting I <sup>2</sup> t A <sup>2</sup> Sec |
|----------------|---------------|----------------|------------------------------|---|
| 0233 001       | 1             | 125            | 0.18                         | 2.03  |
| 0233 1.25      | 1.25          | 125            | 0.13                         | 3.48  |
| 0233 01.6      | 1.6           | 125            | 0.088                        | 6.31  |
| 0233 002.      | 2             | 125            | 0.068                        | 10.2  |
| 0233 02.5      | 2.5           | 125            | 0.052                        | 17.5  |
| 0233 003.      | 3             | 125            | 0.043                        | 27.0  |
| 0233 3.15      | 3.15          | 125            | 0.038                        | 30.6  |
| 0233 03.5      | 3.5           | 125            | 0.034                        | 37.3  |
| 0233 004.      | 4             | 125            | 0.032                        | 53.0  |
| 0233 005.      | 5             | 125            | 0.022                        | 92.4  |
| 0233 006.      | 6             | 125            | 0.018                        | 135   |
| 0233 06.3      | 6.3           | 125            | 0.017                        | 156   |



## 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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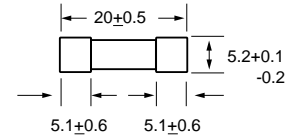
**RoHS** **Pb** **5 x 20 mm** Medium-Acting Fuse 233 Series



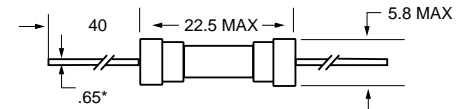
## Agency Approvals

| Agency Approvals |   | Ampere Range                               |
|------------------|---|--|
|                  | Certificate No. Cartridge<br>NBK280602-E10480 C<br>NBK290502-E10480 I<br>Leaded<br>NBK280602-E10480 D<br>NBK290502-E10480 J | 1A – 5A 125V 10000A<br>6A & 6.3A 125V 500A |
|                  | Certificate No. SU05001-2010  | 1A – 6.3A                                  |
|                  | Listed File No. E10480<br>Guide No. JDYX  |  |
|                  | File No. 029862<br>Cert. Class No. LR1422-01  |  |
|                  |   |  |

**0233 000<sup>1</sup>**



**0233000XE<sup>2</sup>**

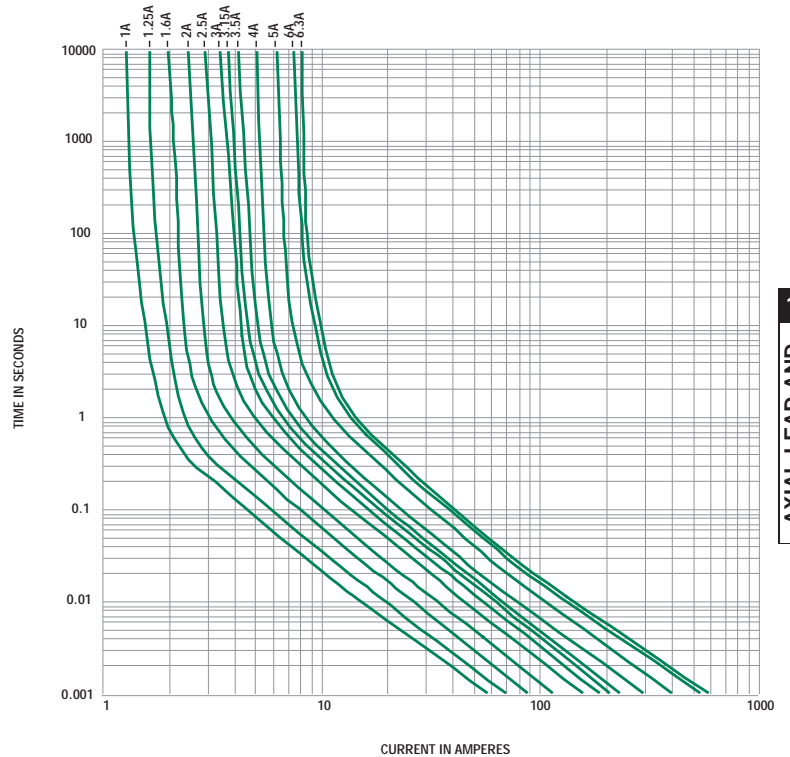


All dimensions in mm

Notes:

- \* Ratings above 6.3A have 0.8 mm dia lead
- 1 For RoHS compliant parts add suffix 'XP'
- 2 For RoHS compliant parts add suffix 'P'

## Average Time Current Curves



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AXIAL LEAD AND CARTRIDGE FUSES