

RoHS **Pb** **232 Series, 5 x 20 mm, Medium-Acting Fuse**


Description

5x20mm medium-acting glass body cartridge fuse designed to Meti B Standard.

Features

- Designed to Japanese Standard JIS C6575
- Available in cartridge and axial lead format
- RoHS compliant and lead-free

Applications

Used as supplementary protection in appliance or utilization equipment to provide individual protection for components or internal circuits.

Agency Approvals

| Agency | Agency File Number | Ampere Range |
|--------|---|-----------------------|
| | Cartridge Certificates: NBK260202-E10480 B NBK290502-E10480 D | 1A – 5A 6.3A – 10A |
| | Leaded Certificates: NBK290502-E10480 B NBK290502-E10480 F | 1A – 5A 6.3A – 10A |
| | Certificates: SU05001-2015 | 1A – 10A |
| | | 1A – 10A |

Electrical Characteristics for Series

| % of Ampere Rating | Opening Time |
|--------------------|--------------------|
| 130% | 1 hour, Minimum |
| 160% | 1 hour, Maximum |
| 200% | 2 minutes, Maximum |

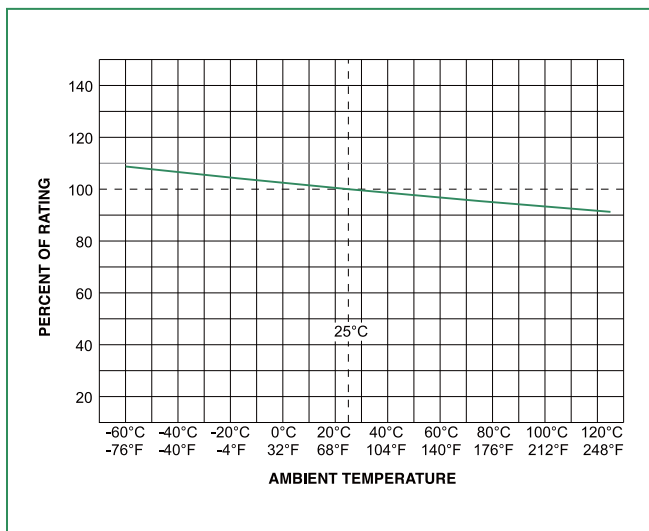
Electrical Characteristic Specifications by Item

| Amp Code | Amp Rating (A) | Voltage Rating (V) | Interrupting Rating | Nominal Cold Resistance (Ohms) | Nominal Melting I ² t (A ² sec) | Agency Approvals | | |
|----------|----------------|--------------------|---------------------|--------------------------------|---|------------------|---|---|
| | | | | | | | | |
| 001. | 1 | 125/250 | 10,000A @ 125VAC | 0.0923 | 1.37300 | x | x | x |
| 1.25 | 1.25 | 125/250 | | 0.0685 | 4.11000 | x | x | x |
| 01.6 | 1.6 | 125/250 | | 0.0537 | 6.96000 | x | x | x |
| 002. | 2 | 125/250 | | 0.0370 | 8.25000 | x | x | x |
| 02.5 | 2.5 | 125/250 | | 0.0291 | 13.87500 | x | x | x |
| 003. | 3 | 125/250 | | 0.0226 | 17.19000 | x | x | x |
| 3.15 | 3.15 | 125/250 | | 0.0215 | 21.9500 | x | x | x |
| 004. | 4 | 125/250 | | 0.0174 | 37.73000 | x | x | x |
| 005. | 5 | 125/250 | | 0.0134 | 56.72000 | x | x | x |
| 06.3 | 6.3 | 125/250 | | 0.0102 | 90.41500 | x | x | x |
| 008.* | 8 | 125/250 | 300A @ 125VAC | 0.0076 | 182.58000 | x | x | x |
| 010.* | 10 | 125/250 | | 0.0059 | 290.66500 | x | x | x |

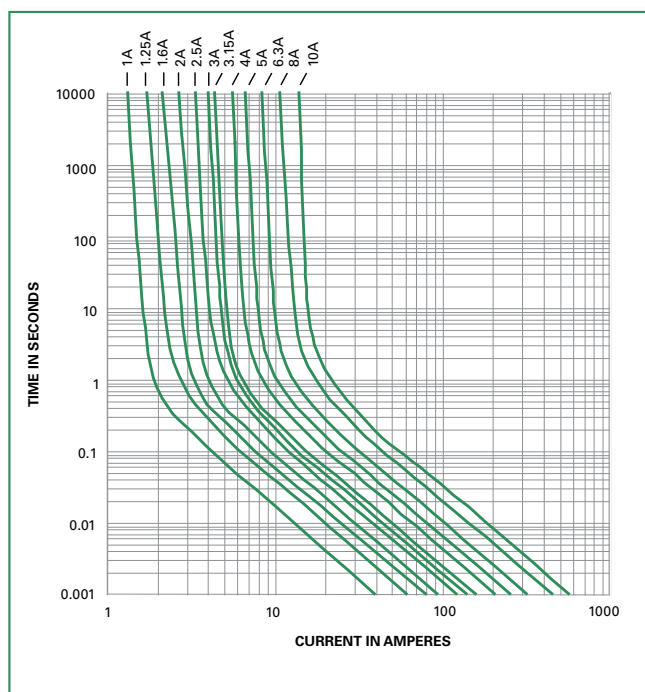
To order 125Vac rated, please add part no. suffix

* Interrupting Rating for 8A & 10A is 100A@250Vac

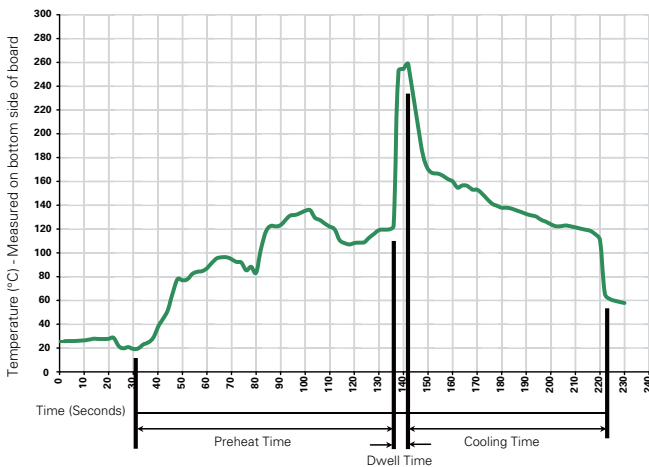
Temperature Derating Curve



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.

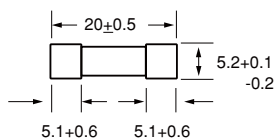
Product Characteristics

| | |
|--------------------------|--|
| Materials | Body: Glass Cap: Nickel-plated brass Leads: Tin-plated Copper |
| Terminal Strength | MIL-STD-202G, Method 211A. Test Condition A |
| Solderability | Reference IEC 60127 Second Edition 2003-01 Annex A |
| Product Marking | Cap 1: Brand log, current and voltage ratings, and agency approval Cap 2: Blank |
| Packaging | Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel) |

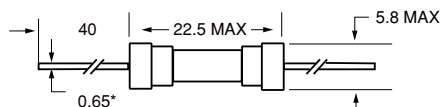
| | |
|------------------------------|--|
| Operating Temperature | -55°C to +125°C |
| Thermal Shock | MIL-STD-202G, Method 107G, Test Condition B: (5 cycles -65°C + 125°C) |
| Vibration | MIL-STD-202G, Method 201A |
| Humidity | MIL-STD-202G, Method 103B, Test Condition A high RH (95%) and elevated temperature (40°C) for 240 hours. |
| Salt Spray | MIL-STD-202G, Method 101D, Test Condition B |

Dimensions

0232 000P



0232 000 XEP



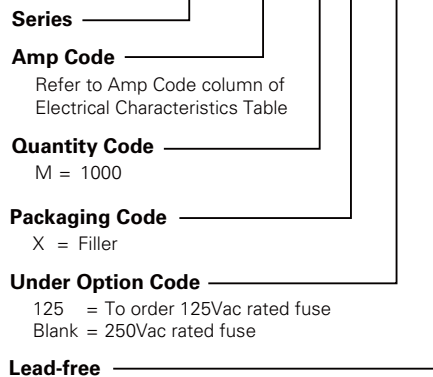
All dimensions in mm

Notes:

* Ratings above 6.3A have 0.8 mm dia lead

Part Numbering System

0232 xxxx M X 125 P



Packaging

| Packaging Option | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width |
|-------------------|-------------------------|----------|---------------------------|--------------|
| 232 Series | | | | |
| Bulk | N/A | 1000 | MX | N/A |
| Bulk | N/A | 1000 | MXE | N/A |

