

**RoHS**  **219XA Series, 5x20mm, Time-Lag (Slo-Blo®) Fuse**

**Description**

5x20mm time-Lag glass body cartridge fuse designed to IEC specification








**Features**

- Designed to International (IEC ) Standards for use globally
- Meets the IEC 60127-2, Sheet 6 specification for time-Lag fuses
- Available in cartridge and axial lead form
- 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 Certifications:<br>NBK220604-E10480A<br>NBK230604-E10480A<br>Leaded Certifications:<br>NBK220604-E10480B<br>NBK230604-E10480B | 1A – 5A<br>6.3A<br><br>1A – 5A<br>6.3A     |
|   | Certifications:<br>2004010207110266<br>2003010207079982   | 125mA – 800mA<br>1A – 6.3A                 |
|  | Recognised File:<br>E10480<br>Guide:<br>JDYX2   | 40mA – 6.3A                                |
|  | File and Acc. Class:<br>029862_0_000  | 125mA – 6.3A                               |
|  | File:<br>604904/604924<br>402708<br>310144  | 40mA – 100mA<br>125mA – 800mA<br>1A – 6.3A |
|  | License:<br>40016080  | 125mA – 6.3A                               |
|  |   | 40mA – 6.3A                                |

**Electrical Characteristics for Series**

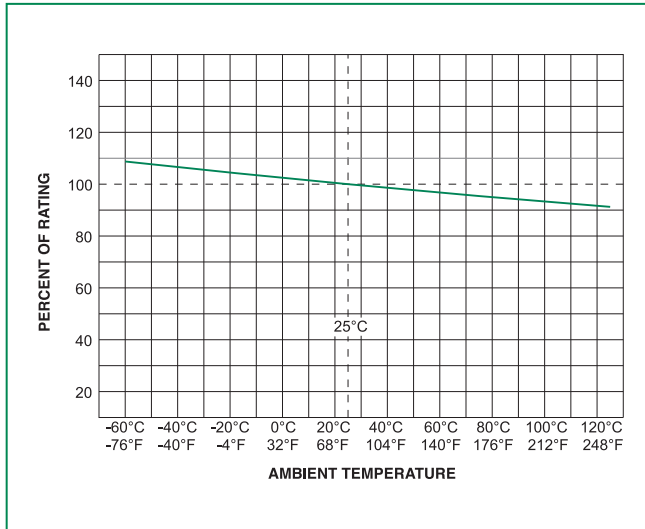
| % of Ampere Rating | Ampere Rating | Opening Time                |
|--------------------|---------------|-----------------------------|
| 150%               | 40mA – 100mA  | 1 hours, Minimum            |
|                    | 125mA – 6.3A  | 1 hours, Minimum            |
| 210%               | 40mA – 100mA  | 2 minutes, Maximum          |
|                    | 125mA – 6.3A  | 2 minutes, Maximum          |
| 275%               | 40mA – 100mA  | 0.2 sec., Min; 10 sec. Max  |
|                    | 125mA – 6.3A  | 0.6 sec., Min; 10 sec. Max  |
| 400%               | 40mA – 100mA  | 0.04 sec., Min; 3 sec. Max  |
|                    | 125mA – 6.3A  | .15 sec., Min; 3 sec. Max   |
| 1000%              | 40mA – 100mA  | .01 sec., Min; 0.3 sec. Max |
|                    | 125mA – 6.3A  | .02 sec., Min; 0.3 sec. Max |

### Electrical Characteristic Specifications by Item

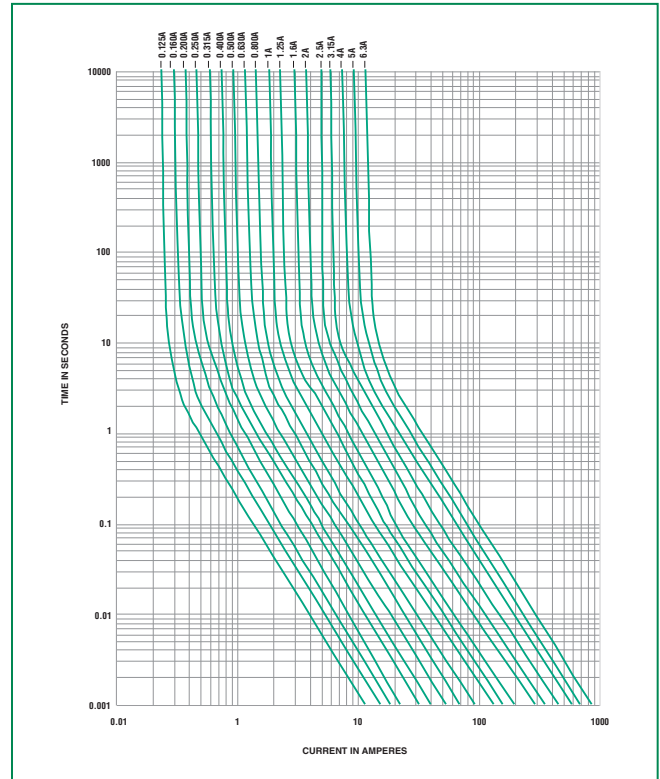
| Amp Code | Amp Rating (A) | Voltage Rating (V) | Interrupting Rating | Nominal Cold Resistance (Ohms) | Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec) | Nominal Voltage Drop at Rated Current (mV) | Nominal Power Dissipation at Rated Current (W) | Agency Approvals |    |    |   |     |    |     |
|----------|----------------|--------------------|---------------------|--------------------------------|---|--|--|------------------|----|----|---|-----|----|-----|
|          |                |                    |                     |                                |   |  |  | PS E             | UL | SA | S | CCC | CE | D E |
| .040     | 0.040          | 250                | 150A @ 250VAC       | 31.8620                        | 0.01100   | 4000                                       | 1.6  |                  | x  |    | x |     | x  |     |
| .050     | 0.050          | 250                |                     | 21.2920                        | 0.01700   | 3500                                       | 1.6  |                  | x  |    | x |     | x  |     |
| .063     | 0.063          | 250                |                     | 14.2685                        | 0.02850   | 3000                                       | 1.6  |                  | x  |    | x |     | x  |     |
| .100     | 0.100          | 250                |                     | 6.0180                         | 0.07900   | 2500                                       | 1.6  |                  | x  |    | x |     | x  |     |
| .125     | 0.125          | 250                |                     | 4.2000                         | 0.13000   | 2000                                       | 1.6  |                  | x  | x  | x | x   | x  | x   |
| .160     | 0.160          | 250                |                     | 2.5500                         | 0.31000   | 1900                                       | 1.6  |                  | x  | x  | x | x   | x  | x   |
| .200     | 0.200          | 250                |                     | 1.6000                         | 0.32000   | 1500                                       | 1.6  |                  | x  | x  | x | x   | x  | x   |
| .250     | 0.250          | 250                |                     | 1.0495                         | 0.54000   | 1300                                       | 1.6  |                  | x  | x  | x | x   | x  | x   |
| .315     | 0.315          | 250                |                     | 0.8475                         | 1.23000   | 1100                                       | 1.6  |                  | x  | x  | x | x   | x  | x   |
| .400     | 0.400          | 250                |                     | 0.5350                         | 1.40000   | 1000                                       | 1.6  |                  | x  | x  | x | x   | x  | x   |
| .500     | 0.500          | 250                |                     | 0.3700                         | 3.00000   | 900  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| .630     | 0.630          | 250                |                     | 0.2750                         | 4.82000   | 300  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| .800     | 0.800          | 250                |                     | 0.1635                         | 9.35000   | 250  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| 001.     | 1.00           | 250                |                     | 0.1165                         | 19.20000  | 150  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| 1.25     | 1.25           | 250                |                     | 0.0817                         | 27.15000  | 150  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| 01.6     | 1.60           | 250                |                     | 0.0551                         | 44.20000  | 150  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| 002.     | 2.00           | 250                |                     | 0.0452                         | 92.70500  | 150  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| 02.5     | 2.50           | 250                |                     | 0.0305                         | 138.00000   | 120  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| 3.15     | 3.15           | 250                |                     | 0.0231                         | 202.00000   | 100  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| 004.     | 4.00           | 250                |                     | 0.0158                         | 330.00000   | 100  | 1.6  |                  | x  | x  | x | x   | x  | x   |
| 005.     | 5.00           | 250                | 0.0117              | 544.00000                      | 100   | 1.6  |  | x                | x  | x  | x | x   | x  |     |
| 06.3     | 6.3            | 250                | 0.0117              | 1093.03500                     | 100   | 1.6  |  | x                | x  | x  | x | x   | x  |     |

\*4A-6.3A have an Interrupting rating 100A@350Vac.

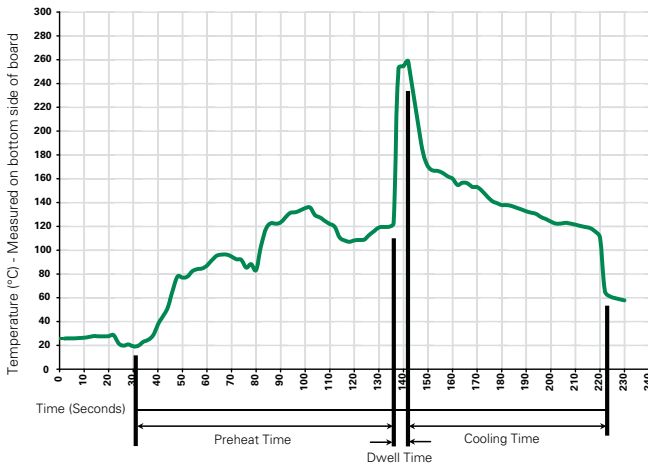
### Temperature Derating Curve



### Average Time Current Curves



### Soldering Parameters - Wave Soldering



#### Recommended Process Parameters:

| Wave Parameter  | Lead-Free Recommendation |
|---|--------------------------|
| <b>Preheat:</b><br>(Depends on Flux Activation Temperature) (Typical Industry Recommendation) |                          |
| Temperature Minimum:  | 100° C                   |
| Temperature Maximum:  | 150° C                   |
| Preheat Time:   | 60-180 seconds           |
| <b>Solder Pot Temperature:</b>  | 260° C Maximum           |
| <b>Solder Dwell Time:</b>   | 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.**

**219XA Series**

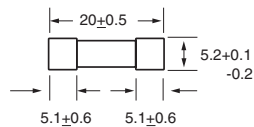
### Product Characteristics

|                          |   |
|--------------------------|---|
| <b>Materials</b>         | Body: Glass<br>Cap: Nickel Plated Brass<br>Leads: Tin Plated Copper                     |
| <b>Terminal Strength</b> | MIL-STD-202G, Method 211A.<br>Test Condition A  |
| <b>Solderability</b>     | Reference IEC 60127 Second Edition<br>2003-01 Annex A                                   |
| <b>Product Marking</b>   | Cap 1: Brand logo, current and voltage rating<br>Cap 2: Agency approval markings Series |
| <b>Packaging</b>         | Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel)                |

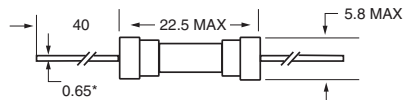
|                              |  |
|------------------------------|--|
| <b>Operating Temperature</b> | -55°C to +125°C  |
| <b>Shock</b>                 | MIL-STD-202G, Method 107G, Test Condition B: (5 cycles -65°C to +125°C)                                  |
| <b>Vibration</b>             | MIL-STD-202G,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

### Dimensions

0219 000XAP



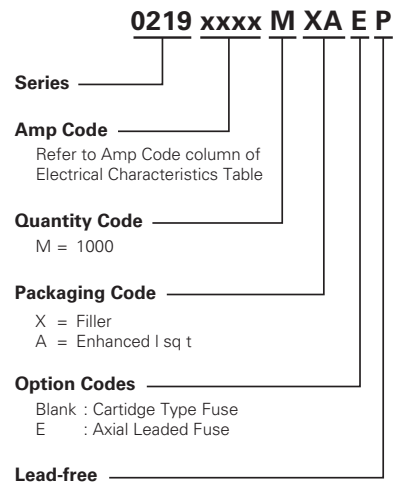
0219000XAEP



All dimensions in mm

Notes:  
\* Ratings above 6.3A have 0.8 mm dia lead

### Part Numbering System



### Packaging

| Packaging Option    | Packaging Specification | Quantity | Quantity & Packaging Code | Taping Width     |
|---------------------|-------------------------|----------|---------------------------|------------------|
| <b>219XA Series</b> |                         |          |                           |                  |
| Bulk                | N/A                     | 1000     | MXA                       | N/A              |
| Bulk                | N/A                     | 1000     | MXAE                      | N/A              |
| Reel and Tape       | EIA 296-E               | 1000     | MRAET1                    | T1=52mm (2.062") |
| Bulk                | N/A                     | 1000     | MXG                       | N/A              |



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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