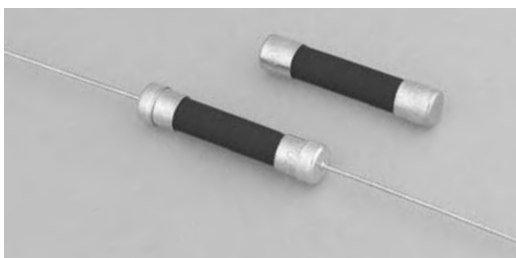


# MDA

## 1/4" x 1 1/4" Time-delay ceramic tube fuses



### Product features

- Time-delay
- Optional axial leads available
- 1/4" x 1-1/4" (6.35 x 31.75 mm) physical size
- Ceramic tube, nickel-plated brass endcap construction
- UL Listed product meets standard 248-14

### Agency information

- UL Listed Card: MDA 1/4 - 20 A (Guide JDYX, File E19180)
- UL Recognized Card: MDA 25 - 30 A (Guide JDYX2, File E19180)
- CSA Certification Card: MDA 1/4 - 20 A (Class No. 1422-01)
- CSA Component Acceptance: MDA 25-30 A (Class No. 1422-30)

### Environmental data

- Shock: 1 A thru 30 A – MIL-STD-202, Method 213, Test Condition J
- Vibration: 1/4 A thru 30 A – MIL-STD-202, Method 204, Test Condition C (Except 5 g, 500 Hz)

### Ordering

- Specify packaging, product and option code.

| Electrical Characteristics |            |                  |
|----------------------------|------------|------------------|
| Rated Current              | Amp Rating | Opening Time     |
| 1/4 - 30 A                 | 100%       | None             |
|                            | 135%       | 60 minutes Max.  |
|                            | 200%       | 120 seconds Max. |

| Specifications |                |     |                             |       |                                  |                                  |                                      |                       |
|----------------|----------------|-----|-----------------------------|-------|----------------------------------|----------------------------------|--------------------------------------|-----------------------|
| Part Number    | Voltage Rating |     | AC Interrupting Rating* (A) |       | DC Interrupting Rating (A) 125 V | Typical DC Cold Resistance** (Ω) | Typical Melting I <sup>2</sup> t† AC | Typical Voltage Drop‡ |
|                | Vac            | Vdc | 250 V                       | 125 V |                                  |                                  |                                      |                       |
| MDA-1/4-R      | 250            | -   | 35                          | 10000 | -                                | 8.7                              | 0.748                                | 4.00                  |
| MDA-1/2-R      | 250            | -   | 35                          | 10000 | -                                | 1.78                             | 2.53                                 | 1.42                  |
| MDA-3/4-R      | 250            | -   | 35                          | 10000 | -                                | 0.82                             | 8.58                                 | 1.31                  |
| MDA-1-R        | 250            | -   | 35                          | 10000 | -                                | 0.56                             | 12.21                                | 1.03                  |
| MDA-1-1/2-R    | 250            | -   | 100                         | 10000 | -                                | 0.2565                           | 27.5                                 | 0.691                 |
| MDA-2-R        | 250            | -   | 100                         | 10000 | -                                | 0.17                             | 70.4                                 | 0.623                 |
| MDA-2-1/2-R    | 250            | -   | 200                         | 10000 | -                                | 0.068                            | 31.79                                | 0.213                 |
| MDA-3-R        | 250            | -   | 200                         | 10000 | -                                | 0.0525                           | 44.99                                | 0.182                 |
| MDA-4-R        | 250            | -   | 200                         | 10000 | -                                | 0.03575                          | 147.4                                | 0.162                 |
| MDA-5-R        | 250            | -   | 200                         | 10000 | -                                | 0.0256                           | 380.49                               | 0.145                 |
| MDA-6-R        | 250            | -   | 200                         | 10000 | -                                | 0.02035                          | 587.73                               | 0.141                 |
| MDA-7-R        | 250            | -   | 200                         | 10000 | -                                | 0.0165                           | 638.33                               | 0.137                 |
| MDA-8-R        | 250            | -   | 200                         | 10000 | -                                | 0.013                            | 1038.4                               | 0.134                 |
| MDA-10-R       | 250            | -   | 200                         | 10000 | -                                | 0.00925                          | 1620.43                              | 0.135                 |
| MDA-12-R       | 250            | -   | 750                         | 10000 | -                                | 0.00755                          | 125.18                               | 0.128                 |
| MDA-15-R       | 250            | -   | 750                         | 10000 | -                                | 0.00565                          | 336.82                               | 0.107                 |
| MDA-20-R       | 250            | 125 | 1500                        | 10000 | 10000                            | 0.004065                         | 483.45                               | 0.095                 |
| MDA-25-R       | 250            | 125 | 1500                        | 10000 | 10000                            | 0.0031                           | 734.69                               | 0.105                 |
| MDA-30-R       | 250            | 125 | 1500                        | 10000 | 10000                            | 0.002465                         | 1096.7                               | 0.110                 |

\* Interrupting Ratings (Measured at 70% - 80% power factor on AC. The interrupting ratings for 25 A, 30 A were measured at 90% - 100% power factor on AC) \*\*

DC Cold Resistance (Measured at <10% of rated current)

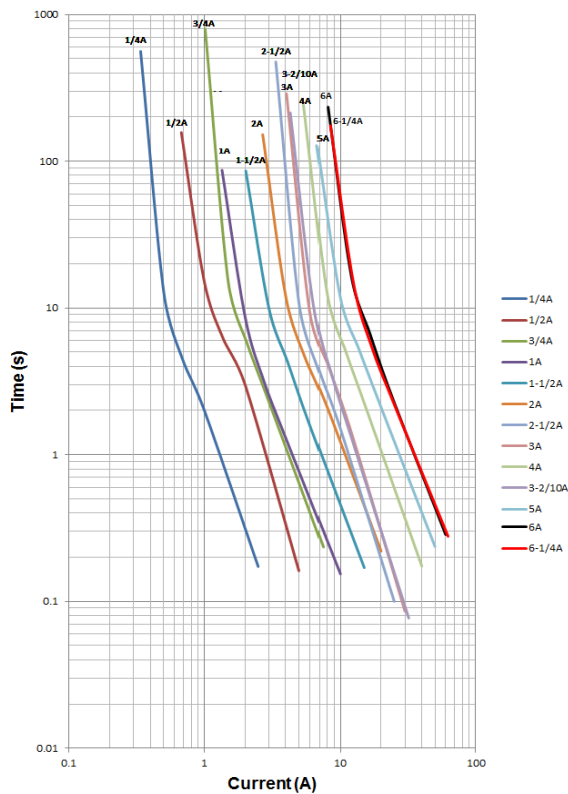
† Typical Melting I<sup>2</sup>t (A<sup>2</sup>sec) (I<sup>2</sup>t was measured at listed interrupting rating and rated voltage)

‡ Typical Voltage Drop (Voltage drop was measured at +25 °C ambient temperature at rated current)

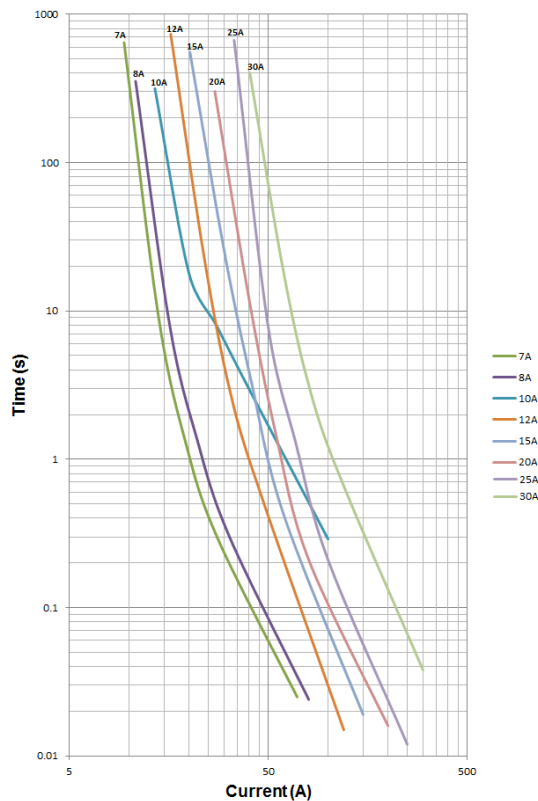


Powering Business Worldwide

Time-Current Curves (1/4 A - 6 1/4 A)

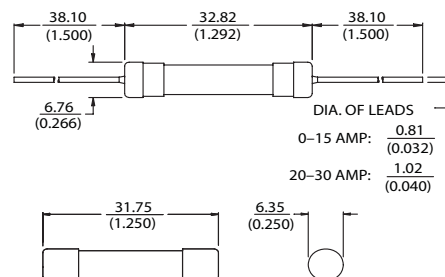


Time-Current Curves (7 A - 30 A)



Dimensions - mm (in)

Drawing Not to Scale



| Packaging Code        |                                          |
|-----------------------|------------------------------------------|
| Packaging Code Prefix | Description                              |
| BK-                   | 100 fuses packed into a cardboard carton |

| Option Code |                                                                    |
|-------------|--------------------------------------------------------------------|
| Option Code | Description                                                        |
| B           | Sealed to withstand aqueous cleaning (Board Washable)              |
| V           | Axial leads - copper tinned wire with nickel plated brass overcaps |

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

**Eaton**  
**Electronics Division**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
[www.eaton.com/electronics](http://www.eaton.com/electronics)

© 2017 Eaton  
All Rights Reserved  
Printed in USA  
Publication No. 2002 BU-SB11875  
July 2017