

# 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. |

| 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    |                                  |                                  |                                      |                       |
| 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 |

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