

# 1/4" x 1 1/4" Ceramic Tube Fuses MDA Series, Time-Delay

#### **Description**

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

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

#### **Agency Information**

- UL Listed Card: MDA 2/10 20A (Guide JDYX, File E19180)
- UL Recognized Card: MDA 25 30A (Guide JDYX2, File E19180)
- CSA Certification Card: MDA 2/10 20 (Class No. 1422-01)
- CSA Component Acceptance: MDA 25-30A (Class No. 1422-30)

#### **Environmental Data**

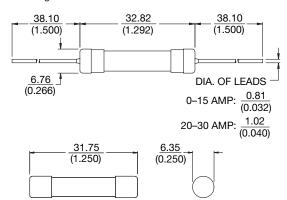
- Shock: 1/100A and 8/10A MIL-STD-202, Method 213, Test Condition I; 1A thru 30A – MIL-STD-202, Method 213, Test Condition J
- Vibration: 1/100A and 8/10A MIL-STD-202, Method 201; 1/4A thru 30A – MIL-STD-202, Method 204, Test Condition C (Except 5g, 500HZ)





## Dimensions - mm (in)

Drawing Not to Scale



### **Ordering**

· Specify packaging, product, and option code

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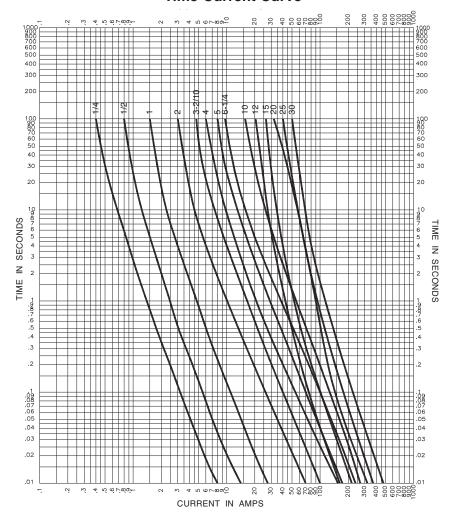
| SPECIFICATIONS |     |              |      |                       |                               |                              |                         |                    |
|----------------|-----|--------------|------|-----------------------|-------------------------------|------------------------------|-------------------------|--------------------|
| Part<br>Number |     | tage<br>ting |      | errupting<br>* (amps) | DC Interrupting Rating (amps) | Typical DC Cold Resistance** | Typical<br>Melting I²t† | Typical<br>Voltage |
| Number         | Vac | Vdc          | 250V | 125V                  | 125V                          | (Ω)                          | AC                      | Drop‡              |
| MDA-1/4-R      | 250 | -            | 35   | 10000                 | -                             | 9.325                        | 0.748                   | 4.00               |
| MDA-1/2-R      | 250 | -            | 35   | 10000                 | -                             | 1.925                        | 2.53                    | 1.42               |
| MDA-3/4-R      | 250 | -            | 35   | 10000                 | -                             | 0.8555                       | 8.58                    | 1.31               |
| MDA-1-R        | 250 | -            | 35   | 10000                 | -                             | 0.560                        | 12.21                   | 1.03               |
| MDA-1-1/2-R    | 250 | -            | 100  | 10000                 | -                             | 0.2585                       | 27.5                    | 0.691              |
| MDA-2-R        | 250 | -            | 100  | 10000                 | -                             | 0.170                        | 70.4                    | 0.623              |
| MDA-2-1/2-R    | 250 | -            | 200  | 10000                 | -                             | 0.06685                      | 31.79                   | 0.213              |
| MDA-3-R        | 250 | -            | 200  | 10000                 | -                             | 0.05350                      | 44.99                   | 0.182              |
| MDA-4-R        | 250 | -            | 200  | 10000                 | -                             | 0.03625                      | 147.4                   | 0.162              |
| MDA-5-R        | 250 | -            | 200  | 10000                 | -                             | 0.02610                      | 380.49                  | 0.145              |
| MDA-6-R        | 250 | -            | 200  | 10000                 | -                             | 0.02120                      | 587.73                  | 0.141              |
| MDA-7-R        | 250 | -            | 200  | 10000                 | -                             | 0.01690                      | 638.33                  | 0.137              |
| MDA-8-R        | 250 | -            | 200  | 10000                 | -                             | 0.01350                      | 1038.4                  | 0.134              |
| MDA-10-R       | 250 | -            | 200  | 10000                 | -                             | 0.00948                      | 1620.43                 | 0.135              |
| MDA-12-R       | 250 | -            | 750  | 10000                 | -                             | 0.00725                      | 125.18                  | 0.128              |
| MDA-15-R       | 250 | -            | 750  | 10000                 | -                             | 0.00553                      | 336.82                  | 0.107              |
| MDA-20-R       | 250 | 125          | 1500 | 10000                 | 10000                         | 0.00400                      | 483.45                  | 0.095              |
| MDA-25A-R      | 250 | 125          | 1500 | 10000                 | 10000                         | 0.00305                      | 734.69                  | 0.105              |
| MDA-30A-R      | 250 | 125          | 1500 | 10000                 | 10000                         | 0.00243                      | 1096.7                  | 0.110              |

- \* Interrupting Ratings (Measured at 70% 80% power factor on AC. The interrupting ratings for 25Amp, 30Amp were measured at 90% 100% power factor on AC)
- \*\* DC Cold Resistance (Measured at ≤10% of rated current)
- † Typical Melting I²t (A²Sec) (I²t was measured at listed interrupting rating and rated voltage)
- ‡ Typical Voltage Drop (Voltage drop was measured at 25°C ambient temperature at rated current)



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#### **Time-Current Curve**



| Packaging Code |  |  |
|----------------|--|--|
| Packaging Code | Description                                |  |
| BK             | 100 fuses packed into a cardboard carton   |  |
| BK1            | 1,000 fuses packed into a cardboard carton |  |
| BK8            | 8,000 fuses packed into a cardboard carton |  |

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

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