

# 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

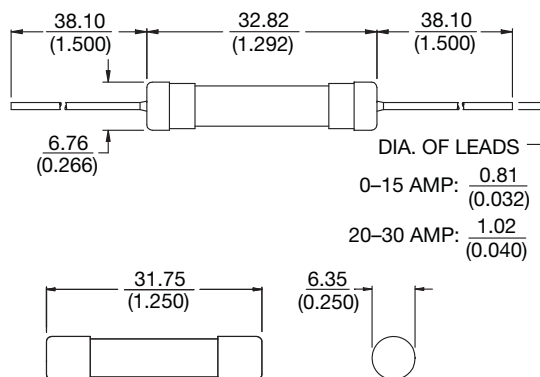
- UL Listed Card: MDA 2/10 - 20A (Guide JDYX, File E19180)
- UL Recognized Card: MDA 25 - 30A (Guide JDYX2, File E19180)
- CSA Certification Card: MDA 2/10 - 20 (Class No. 1422-01)
- CSA Component Acceptance: MDA 25-30A (Class No. 1422-30)

## 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

## SPECIFICATIONS

| Part Number | Voltage Rating |     | AC Interrupting Rating* (amps) |       | DC Interrupting Rating (amps)<br>125V | Typical DC Cold Resistance** (Ω) | Typical Melting I <sup>2</sup> t† (A <sup>2</sup> Sec) AC | Typical Voltage Drop‡ |
|-------------|----------------|-----|--------------------------------|-------|---------------------------------------|----------------------------------|---|-----------------------|
|             | Vac            | Vdc | 250V                           | 125V  |                                       |                                  |   |                       |
| 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                 |

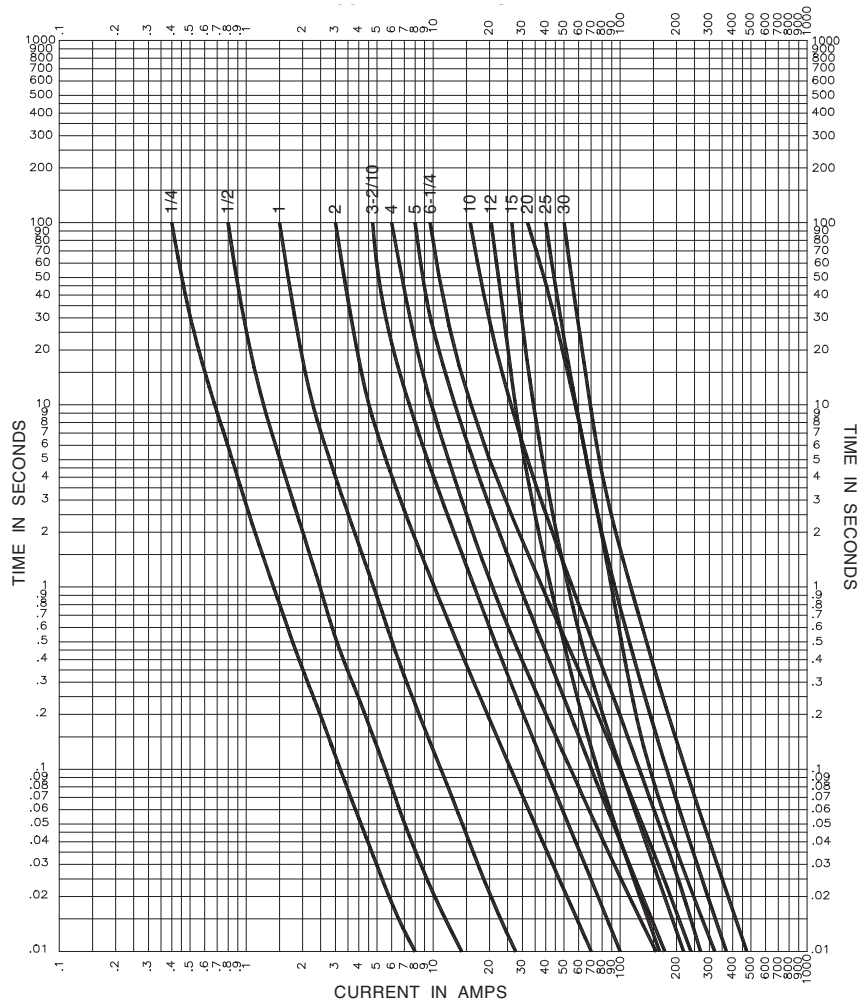
\* Interrupting Ratings (Measured at 70% - 80% power factor on AC. The interrupting ratings for 25Amp, 30Amp were measured at 90% - 100% power factor on AC)

\*\* DC Cold Resistance (Measured at ≤10% of rated current)

† Typical Melting 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)

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

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