

# 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

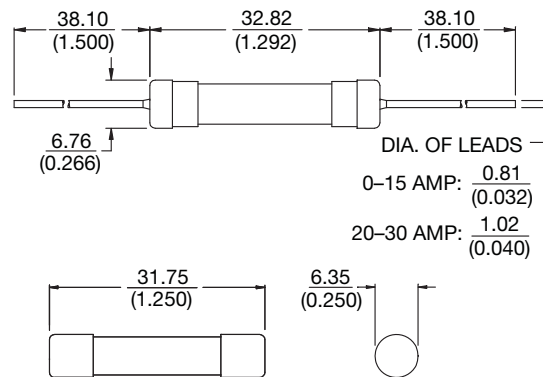
- UL Listed Card: MDA 2/10 - 20A (Guide JDYX, File E19180)
- UL Recognized Card: MDA 25 - 30A (Guide JDYX2, File E19180)
- CSA Certification Card: MDA 2/10 - 20 (Class No. 1422-01)
- CSA Component Acceptance: MDA 25-30A (Class No. 1422-30)

## 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) 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

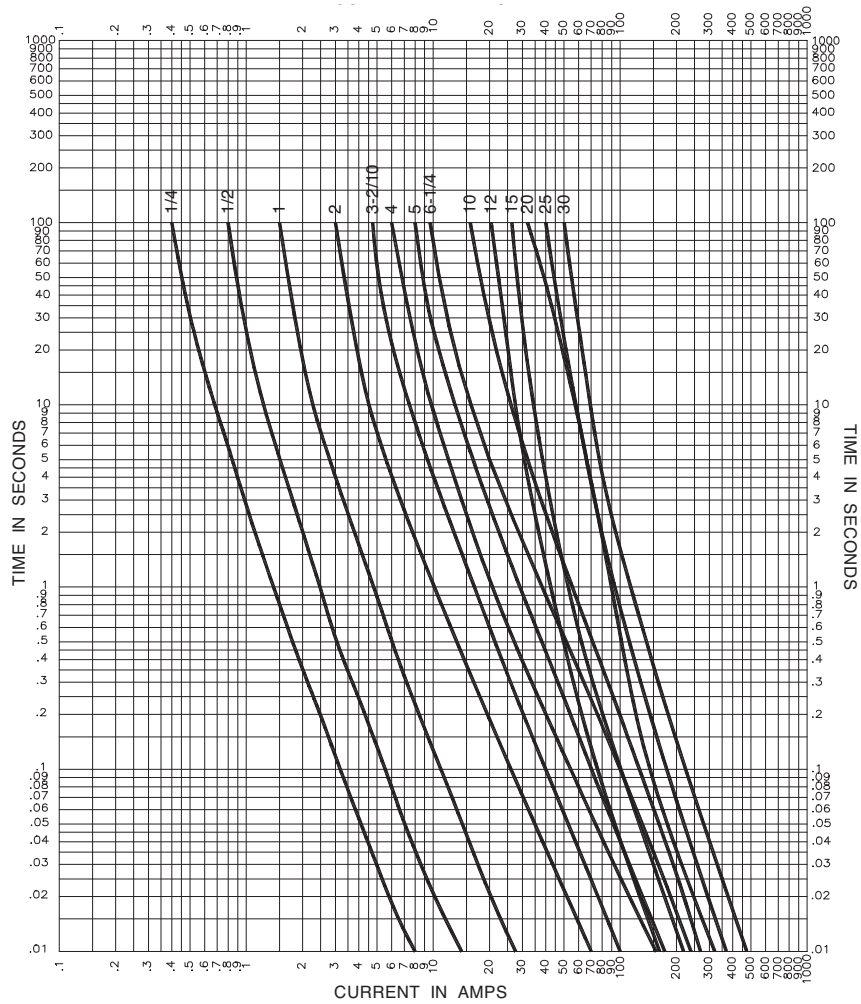
\* Interrupting Ratings (Measured at 70% - 80% power factor on AC. The interrupting ratings for 25Amp, 30Amp were measured at 90% - 100% power factor on AC)

\*\* 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

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Cooper Bussmann 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.

© 2009 Cooper Bussmann  
St. Louis, MO 63178  
www.cooperbussmann.com

