

# 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)

### General specifications

- 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 code prefix, part number and and option code. Replace the "I" with a "-" (i.e. BK-MDA-BV-1-4-R)

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	125	200	10000	10000	0.068	31.79	0.213
MDA-3-R	250	125	200	10000	10000	0.0525	44.99	0.182
MDA-4-R	250	125	200	10000	10000	0.03575	147.4	0.162
MDA-5-R	250	125	200	10000	10000	0.0256	380.49	0.145
MDA-6-R	250	125	200	10000	10000	0.02035	587.73	0.141
MDA-7-R	250	125	200	10000	10000	0.0165	638.33	0.137
MDA-8-R	250	125	200	10000	10000	0.013	1038.4	0.134
MDA-10-R	250	125	200	10000	10000	0.00925	1620.43	0.135
MDA-12-R	250	125	750	10000	10000	0.00755	125.18	0.128
MDA-15-R	250	125	750	10000	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)

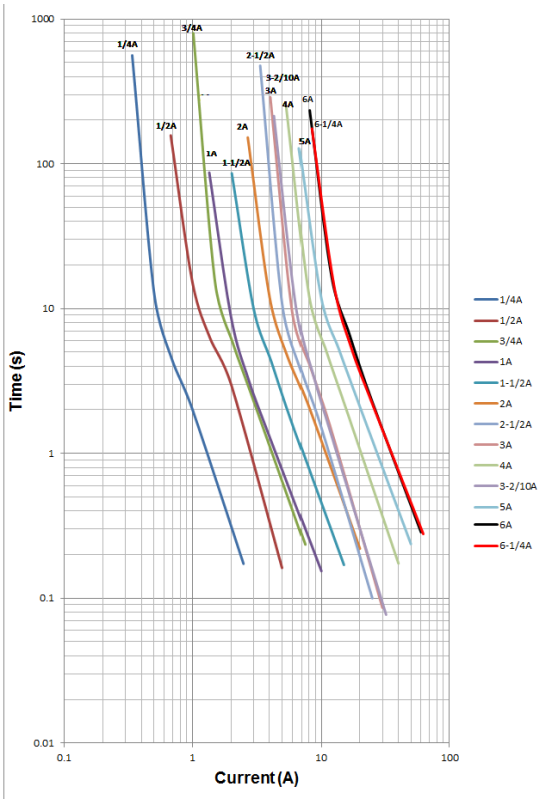
† Typical melting I<sup>2</sup>t (A<sup>2</sup>sec) (I<sup>2</sup>t was measured at listed interrupting rating and rated voltage)

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

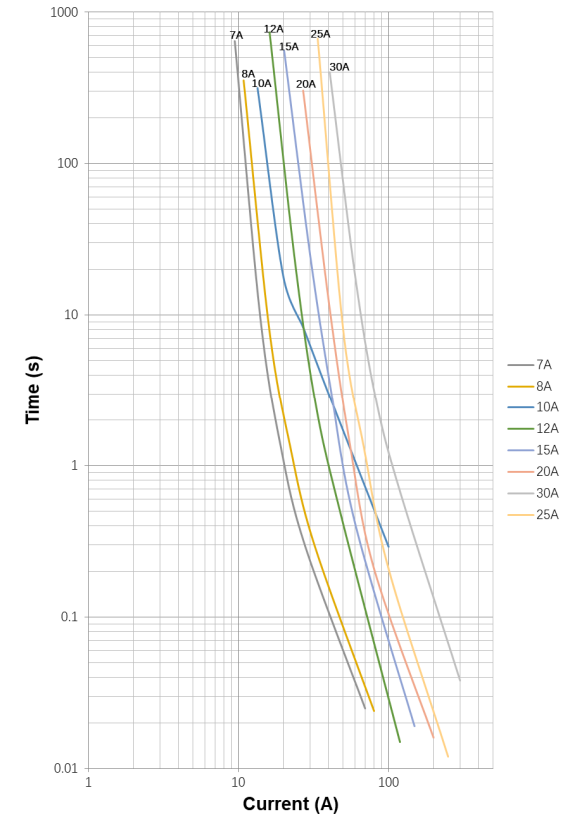


Powering Business Worldwide

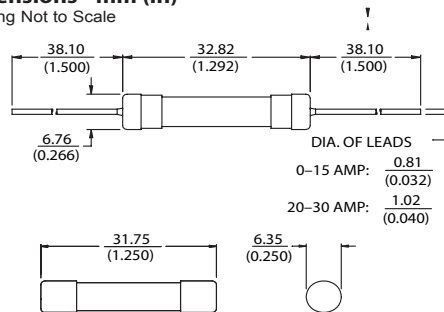
**Time-current curves (1/4 A - 6 1/4 A)**



**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  
Eaton.com/electronics

© 2020 Eaton  
All Rights Reserved  
Printed in USA  
Publication No. 2002  
August 2020

Eaton is a registered trademark.

All other trademarks are property of their respective owners.

Follow us on social media to get the latest product and support information.

