

1/4" x 1 1/4" Fuses



**MDL**  
**MDL-V (Axial Leads)**

**Time-Delay**

**Physical Size:**

1/4" x 1 1/4"  
(6.3mm x 32mm)

**Construction:** Glass Tube  
Nickel Plated Brass End Caps

**Voltage Rating:** See Below

**Interrupting Rating:** See Below

**Agency Approvals:** C€

U.L. Listed, Std. 248-14, Guide JDYX,  
File E19180; 1/16-8A

CSA Certified, C22.2 No. 248.14,  
Class 1422-01, File 53787, 1/16-8A

U.L. Recognized, Guide JDYX2,  
File E19180, 9-30A

**Electrical Characteristics**

Current Rating	Rated Voltage		Interrupting Rating <sup>1</sup>	
	AC (Max.)	DC (Max.) <sup>2</sup>	AC	DC <sup>2</sup>
1/16	250V	250V	35A	35A
1/10	250V	250V	35A	35A
1/8	250V	250V	35A	35A
3/16	250V	250V	35A	—
1/4	250V	250V	35A	35A
5/16	250V	250V	35A	35A
3/8	250V	250V	35A	35A
1/2	250V	250V	35A	35A
3/4	250V	250V	35A	35A
1	250V	250V	35A	35A
1 1/4	250V	250V	100A	100A
1 1/2	250V	250V	100A	100A
2	250V	250V	100A	100A
2 1/4	250V	250V	100A	100A
2 1/2	250V	250V	100A	100A
3	250V	250V	100A	100A
4	250V	125V/32V	200A	10kA/1kA
5	250V	125V/32V	200A	10kA/1kA
6	250V	125V/32V	200A	10kA/1kA
7	250V	125V/32V	200A	10kA/1kA
8	250V	250V/125V	200A	200kA/1kA
9	32V	125V/32V	1000A	10kA/1kA
10	32V	125V/32V	1000A	10kA/1kA
15	32V	32V	1000A	1000A
20	32V	32V	1000A	1000A
25	32V	32V	1000A	1000A
30	32V	32V	1000A	1000A

<sup>1</sup>Interrupting ratings were measured at 70% – 80% power factor on AC, and at a time constant described in U.L. 198L.

<sup>2</sup>DC ratings are self-certified.

BIF document: 2004



**MDQ**  
**Dual-Element, Time-Delay**

**Physical Size:**

1/4" x 1 1/4"  
(6.3mm x 32mm)

**Construction:** Glass Tube

**Agency Approvals:** C€

U.L. Listed, Std. 248-14, File E19180;  
Guide JDYX, 1/16-7A

CSA Certified, C22.2 No. 248.14,  
File 47233, Class 1422-01, 1/16-7A

U.L. Recognized, Guide JDYX2,  
File E19180, 7.5-30A

**Catalog Symbol & Current Ratings**

250 Vac			
MDQ-1/100	MDQ-3/8	MDQ-1 <sup>8</sup> /10	MDQ-7
MDQ-1/32	MDQ-1/10	MDQ-2	<b>32 Vac</b>
MDQ-1/16	MDQ-1/2	MDQ-2 <sup>1</sup> /4	MDQ-7 <sup>1</sup> /2
MDQ-1/10	MDQ-5/10	MDQ-2 <sup>1</sup> /2	MDQ-8
MDQ-1/8	MDQ-3/4	MDQ-2 <sup>8</sup> /10	MDQ-9
MDQ-1 <sup>5</sup> /100	MDQ-5/10	MDQ-3	MDQ-10
MDQ-1 <sup>7</sup> 5/1000	MDQ-1	MDQ-3 <sup>2</sup> /10	MDQ-12
MDQ-3/16	MDQ-1 <sup>2</sup> /10	MDQ-4	MDQ-15
MDQ-2/10	MDQ-1 <sup>1</sup> /4	MDQ-5	MDQ-20
MDQ-1/4	MDQ-1 <sup>1</sup> /2	MDQ-6	MDQ-25
MDQ-3/10	MDQ-1 <sup>6</sup> /10	MDQ-6 <sup>1</sup> /4	MDQ-30

BIF document: 2044



**MDA**  
**MDA-V (Axial Leads)**

**Time-Delay**

**Physical Size:**

1/4" x 1 1/4"  
(6.3mm x 32mm)

**Construction:** Ceramic Tube

**Agency Approvals:** C€

U.L. Listed, Std. 248-14, Guide JDYX,  
File E19180, 0-20A

U.L. Recognized, Guide JDYXZ,  
File E19180, 25-30A

CSA Certified, C22.2 No. 248.14,  
Class 1422-01, File 53787, 0-20A  
Class 1422-30, File 53787, 25-30A

**Electrical Characteristics**

Current Rating	Rated Voltage		Interrupting Rating <sup>1</sup>	
	AC (Max.)	DC (Max.)	AC	DC
2/10	250V	250V	35A	35A
1/4	250V	250V	35A	35A
1/2	250V	250V	35A	35A
3/4	250V	250V	35A	35A
1	250V	250V	35A	35A
1 1/2	250V		100A	
2	250V		100A	100A
2 1/2	250V		100A	
3	250V	250V	100A	
4	250V		200A	
5	250V		200A	
6	250V		200A	
7	250V		200A	
8	250V		200A	
10	250V	250V	200A	200A
15	250V	250V	750A	
20	250V		1500A	
25	250V		1500A	
30	250V		1500A	

<sup>1</sup>Interrupting ratings were measured at 70% – 80% power factor on AC, and at a time constant described in U.L. 198L.

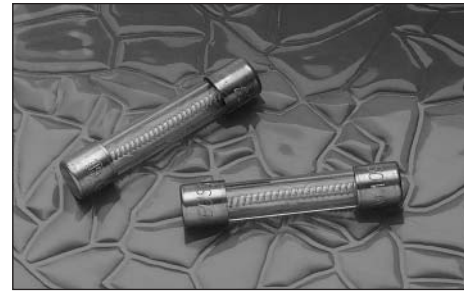
BIF document: 2002



### Description

- Time delay, glass tube
- Optional leaded version available
- 1/4 x 1-1/4 (6.3mm x 32mm) physical size
- Glass tube, nickel-plated brass endcap construction
- UL Listed product meets standard 248-14

ELECTRICAL CHARACTERISTICS		
Rated Current	Amp Rating	Opening Time
1/16 - 30A	100%	None
	135%	60 minutes max.
	200%	120 seconds max.
1/16 - 3A	200%	5 seconds min.
3-2/10 - 8A	200%	12 seconds min.



### Approvals

- UL Listed Card: MDL 1/16 - 8A (Guide JDYX, File E19180)
- UL Recognized Card: MDL 9 - 30A (Guide JDYX2, File E19180)
- CSA Certification Card: MDA 2/10 - 15 (Class No. 1422-01)

### Environmental Data

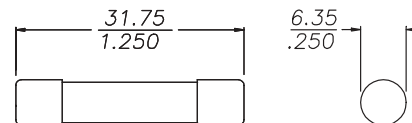
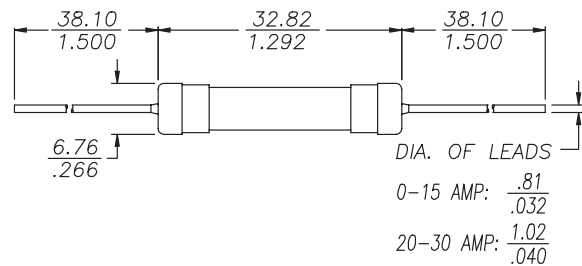
- Shock: 1/100A and 8/10A – MIL-STD-202, Method 213, Test Condition I; 1A thru 30A – MIL-STD-202, Method 207, (HI Shock)
- Vibration: 1/100A and 8/10A – MIL-STD-202, Method 201; 1/4A thru 30A – MIL-STD-202, Method 204, Test Condition C (Except 5g, 500HZ)

### Ordering

- Specify product code, option code and packaging code

### Dimensions (mm/in)

Drawing Not to Scale



### SPECIFICATIONS

Product Code	Voltage Rating AC	AC Interrupting Rating*			Typical DC Cold Resistance** (ohms)	Typical Melting I <sup>2</sup> t†	Typical Voltage Drop‡
		250V	125V	32V			
MDL-1/16	250V	35A	10000A	-	38.000	0.0046	2.79
MDL-1/10	250V	35A	10000A	-	15.900	0.0420	1.95
MDL-1/8	250V	35A	10000A	-	9.850	0.0422	1.52
MDL-3/16	250V	35A	10000A	-	4.680	0.116	N/A
MDL-2/10	250V	35A	10000A	-	4.115	0.314	0.972
MDL-1/4	250V	35A	10000A	-	0.320	0.447	0.965
MDL-3/10	250V	35A	10000A	-	2.300	0.412	0.808
MDL-3/8	250V	35A	10000A	-	2.800	0.982	1.46
MDL-1/2	250V	35A	10000A	-	1.725	1.656	1.27
MDL-3/4	250V	35A	10000A	-	0.822	4.343	1.01
MDL-1	250V	35A	10000A	-	0.525	11.498	0.995
MDL-1-1/4	250V	100A	10000A	-	0.320	86.2	0.722
MDL-1-1/2	250V	100A	10000A	-	0.250	22.7	0.721
MDL-2	250V	100A	10000A	-	0.173	62.3	0.644
MDL-2-1/4	250V	100A	10000A	-	0.068	49.6	0.535
MDL-2-1/2	250V	100A	10000A	-	0.096	63.1	0.410
MDL-3	250V	100A	10000A	-	0.067	67.5	0.345
MDL-4	250V	200A	10000A	-	0.035	19.3	0.187
MDL-5	250V	200A	10000A	-	0.023	32.0	0.160
MDL-6	250V	200A	10000A	-	0.018	37.4	0.155
MDL-7	250V	200A	10000A	-	0.018	42.7	0.140
MDL-8	250V	200A	10000A	-	0.011	47.8	0.119
MDL-9	32V	-	-	1000A	0.009	51.5	0.124
MDL-10	32V	-	-	1000A	0.008	64.4	0.114
MDL-15	32V	-	-	1000A	0.006	354.0	0.130
MDL-20	32V	-	-	1000A	0.002	2914.0	0.530
MDL-25	32V	-	-	1000A	0.001	15221.0	0.30
MDL-30	32V	-	-	1000A	0.001	15581.0	0.40

\* Interrupting Ratings (Interrupting ratings were measured at 70% - 80% power factor on AC)

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

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

‡ Typical Voltage Drop (Voltage drop was measured at 25°C±3°C ambient temperature at rated current)