

# Radial Lead Micro Fuse

## ETF Series, Time Lag

### Description

- RoHS Compliant
- Time lag micro fuse
- Base and cap material is a thermoplastic, UL 94-V0
- Leads are tin plated copper alloy

### Electrical Characteristics

Rated Current	150%		210%		275%		400%		1000%	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
80mA to 6.3A	1 hr.	2 min.	400 ms.	10 sec.	150 ms.	3 sec.	20 ms.	150 ms.		

All are 250V AC

### Agency Information

- Semco Certificate No. 9541256 01 VDE License No. 95402: 80mA to 5A / 35A or 10 *In* whichever is greater @ 250VAC
- UL Recognized File No. E19180, CSA Acceptance File No. LR701159; 80mA to 6.3A / 100A @ 277VAC
- RoHS Compliant

### Environmental Data

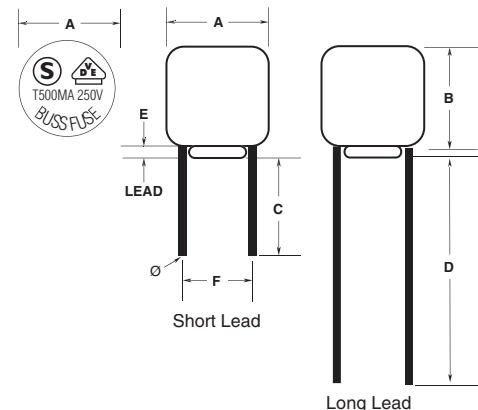
- Soldering Heat Resistance: 260°C, 10 sec. per IEC 68-2-20
- Vibration Resistance: MIL-STD-202, Method 201, 10-55Hz x 3 axis/ no load
- Shock Resistance: MIL-STD-202, Method 213, Condition I (Sawtooth)
- Moisture Resistance: MIL-STD-202F, Method 106
- Salt Spray: MIL-STD-202, Method 101, Condition B (48 hrs)
- Operating Temperature: -55°C to +125°C

### Ordering

- Specify packaging code and product code (i.e., BK/ETF-80mA)



### Dimensional Data

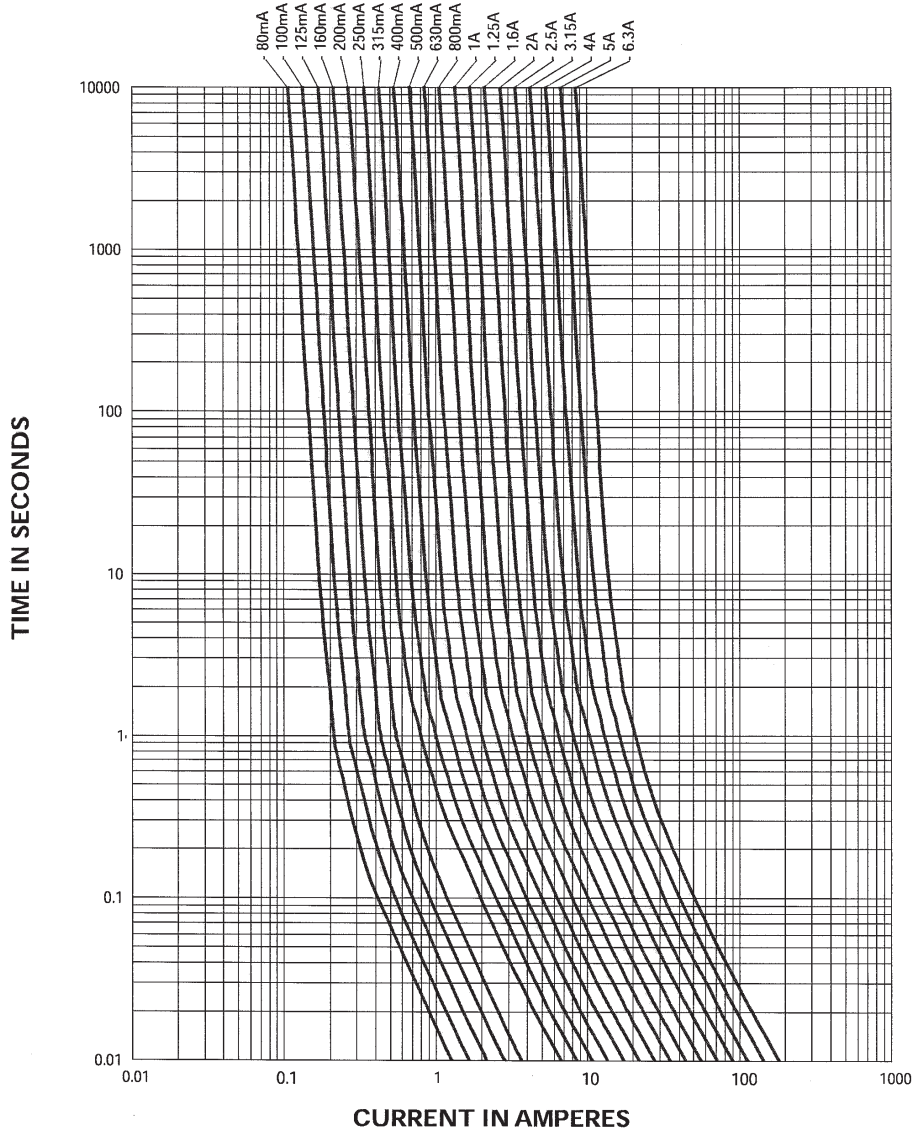


Dimensions  
mm (inches)

	Short Lead	Long Lead
<b>A</b>	8.35 ± 0.1 (0.329)	8.35 ± 0.1 (0.329)
<b>B</b>	7.7 ± 0.1 (0.303)	7.7 ± 0.1 (0.303)
<b>C</b>	4.3 ± 0.3 (0.169)	—
<b>D</b>	—	18.8 ± 0.3 (0.740)
<b>E</b>	0.5 min. (0.020)	0.5 min. (0.020)
<b>F</b>	5.08 ± 0.1 (0.200)	5.08 ± 0.1 (0.200)
<b>∅</b>	0.6 ± 0.1 (0.024)	0.6 ± 0.1 (0.024)

SPECIFICATIONS						
Product Code	Ampere Rating	Typical Cold Resistance (ohm)	Volt-drop @ 100% <i>In</i> (Volt) max.	Melting I <sup>2</sup> T < 10 mSec (A <sup>2</sup> Sec)	Melting I <sup>2</sup> T @ 10 <i>In</i> (A <sup>2</sup> Sec)	Maximum Power Dissipation (W)
ETF-80mA	80mA	3.3	0.4	0.01	0.01	0.1
ETF-100mA	100mA	2.2	0.35	0.02	0.02	0.11
ETF-125mA	125mA	1.5	0.3	0.04	0.04	0.13
ETF-160mA	160mA	1	0.28	0.07	0.06	0.15
ETF-200mA	200mA	0.7	0.25	0.12	0.11	0.17
ETF-250mA	250mA	0.5	0.22	0.38	0.41	0.19
ETF-315mA	315mA	0.38	0.19	0.6	0.66	0.22
ETF-400mA	400mA	0.28	0.16	0.95	1.05	0.25
ETF-500mA	500mA	0.21	0.15	1.5	1.66	0.29
ETF-630mA	630mA	0.16	0.13	2.4	2.6	0.33
ETF-800mA	800mA	0.12	0.12	3.7	4.2	0.38
ETF-1	1A	0.09	0.11	5.9	6.7	0.44
ETF-1.25	1.25A	0.06	0.1	9	11	0.51
ETF-1.6	1.6A	0.047	0.095	15	17	0.58
ETF-2	2A	0.035	0.09	23	27	0.67
ETF-2.5	2.5A	0.026	0.087	37	43	0.77
ETF-3.15	3.15A	0.019	0.083	58	69	0.88
ETF-4	4A	0.014	0.08	92	110	1.02
ETF-5	5A	0.01	0.077	145	175	1.17
ETF-6.3	6.3A	0.008	0.073	230	281	1.34

**TIME CURRENT CURVE**



PACKAGING CODE	
Packaging Code	Description
AP	Ammo-pack taped 1,000 per box (long lead only)
BK	In bulk 100 per bag (short lead only)

**North America**

Cooper Electronic Technologies  
1225 Broken Sound Parkway NW  
Suite F  
Boca Raton, FL 33487-3533  
Tel: 1-561-998-4100  
Fax: 1-561-241-6640  
Toll Free: 1-888-414-2645

Cooper Bussmann  
P.O. Box 14460  
St. Louis, MO 63178-4460  
Tel: 1-636-394-2877  
Fax: 1-800-544-2570

**Europe**

Cooper Electronic Technologies  
Cooper (UK) Limited  
Burton-on-the-Wolds  
Leicestershire • LE12 5TH UK  
Tel: +44 (0) 1509 882 737  
Fax: +44 (0) 1509 882 786

Cooper Electronic Technologies  
Avda. Santa Eulalia, 290  
08223  
Terrassa, (Barcelona), Spain  
Tel: +34 937 362 812  
+34 937 362 813  
Fax: +34 937 362 719

**Asia Pacific**

Cooper Electronic Technologies  
1 Jalan Kilang Timor  
#06-01 Pacific Tech Centre  
Singapore 159303  
Tel: +65 278 6151  
Fax: +65 270 4160