

# Surface Mount Fuses

## Subminiature Surface Mount

### RoHS NANO<sup>2</sup> Slo-Blo<sup>®</sup> Fuse 452/454 Series



The NANO<sup>2</sup> Slo-Blo fuse has enhanced inrush withstand characteristics over the NANO<sup>2</sup> Fast-Acting fuse. The unique time delay feature of this fuse design helps solve the problem of nuisance "opening" by accommodating inrush currents that normally cause a fast-acting fuse to open.

- 452 Series **RoHS Compliant** version now available, use ordering suffix 'L' (see example on data sheet).

#### ELECTRICAL CHARACTERISTICS:

% of Ampere Rating	Opening Time
100%	4 hours, <b>Minimum</b>
200%	1 second, <b>Min.</b> ; 60 seconds, <b>Max.</b>
300%	0.2 seconds, <b>Min.</b> ; 3 seconds, <b>Max.</b>
800%	0.02 seconds, <b>Min.</b> ; 0.1 seconds, <b>Max.</b>

**AGENCY APPROVALS:** Recognized under the Components Program of Underwriters Laboratories and Certified by CSA.

**AGENCY FILE NUMBERS:** UL E10480, CSA LR 29862.

#### INTERRUPTING RATINGS:

50 amperes at 125 VAC/VDC; 300 amperes at 32 VDC

#### ENVIRONMENTAL SPECIFICATIONS:

**Operating Temperature:** -55°C to 125°C.

**Shock:** MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds).

**Vibration:** MIL-STD-202, Method 201 (10–55 Hz, .06 in. total excursion).

**Salt Spray:** MIL-STD-202, Method 101, Test Condition B (48 hrs.).

**Insulation Resistance (After Opening):** MIL-STD-202, Method 302, Test Condition A, (10,000 ohms minimum).

**Resistance to Soldering Heat:** MIL-STD-202, Method 210, (3 sec. at 260°C).

**Thermal Shock:** MIL-STD-202, Method 107, Test Condition B (-65 to 125°C).

**Moisture Resistance:** MIL-STD-202, Method 106, High Humidity (90-98 RH), Heat (65°C).

#### PHYSICAL SPECIFICATIONS:

**Materials:** Body: Ceramic

Terminations: Tin-Lead Alloy

RoHS Compliant Terminations: Gold over Nickel Plated Caps(452)  
Silver Plated Caps(454)

#### Soldering Parameters:

Wave Solder — 260°C, 3 seconds maximum

Reflow Solder — 260°C, 30 seconds maximum

**Solderability:** MIL-STD-202, Method 208.

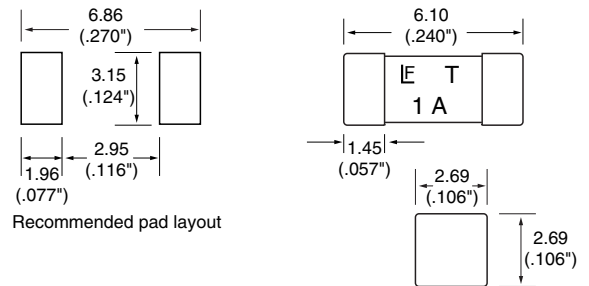
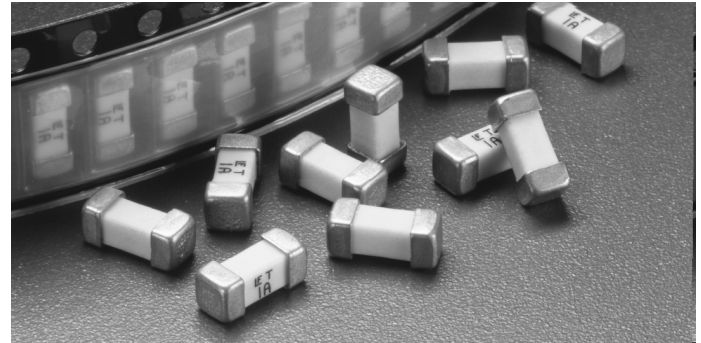
**PACKAGING SPECIFICATIONS:** 12mm Tape and Reel per EIA-RS481-1 (IEC 286, part3); 1,000 pieces per reel, add packaging suffix, MR; 5,000 per reel, add packaging suffix NR.

**Options:** For RoHS Compliant 452 series add the letter 'L' to end of packaging suffix. Example: 0452001.MRL (RoHS Compliant 1A, 1,000 per reel).

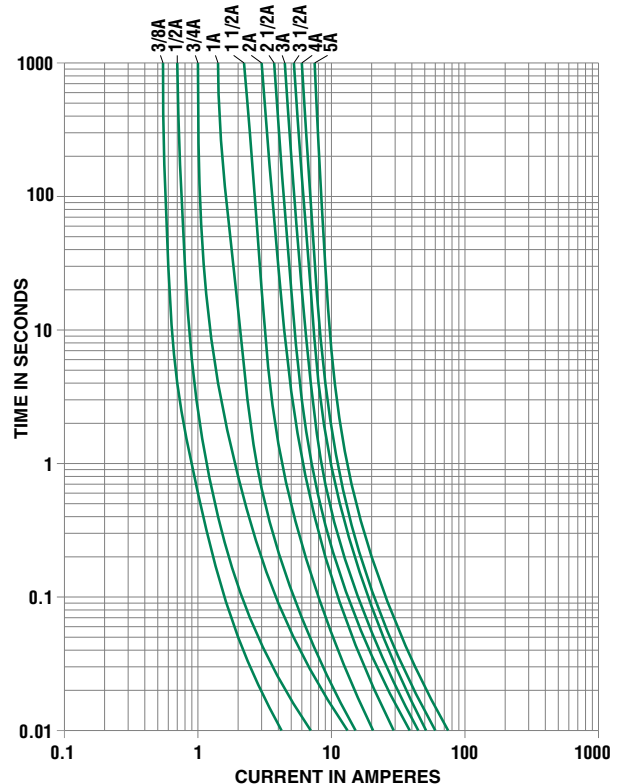
#### PATENTED

#### ORDERING INFORMATION:

Tin-Lead Plated Catalog #	Silver Plated Catalog #	Ampere Rating	Voltage Rating	Nominal Resistance Cold Ohms	Nominal Melting I <sup>2</sup> t A <sup>2</sup> Sec.
0452.375	0454.375	3/8	125	1.20	0.101
0452.500	0454.500	1/2	125	0.700	0.240
0452.750	0454.750	3/4	125	0.360	0.904
0452 001.	0454 001.	1	125	0.225	1.98
0452 01.5	0454 01.5	1 1/2	125	0.0930	3.65
0452 002.	0454 002.	2	125	0.0625	8.20
0452 02.5	0454 02.5	2 1/2	125	0.0450	15.0
0452 003.	0454 003.	3	125	0.0340	20.16
0452 03.5	0454 03.5	3 1/2	125	0.0224	26.53
0452 004.	0454 004.	4	125	0.0186	34.40
0452 005.	0454 005.	5	125	0.0136	53.72



#### Average Time Current Curves



Refer to pg. 271 for SMF Omni-Blok<sup>®</sup> Holder, Series 154 000T.