

Surface Mount Fuses

Subminiature Surface Mount

RoHS NANO²® Slo-Blo® Fuse 452/454 Series



The NANO² Slo-Blo fuse has enhanced inrush withstand characteristics over the NANO² 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, Minimum
200%	1 second, Min. ; 60 seconds, Max.
300%	0.2 seconds, Min. ; 3 seconds, Max.
800%	0.02 seconds, Min. ; 0.1 seconds, Max.

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

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 — 230°C, 30 seconds maximum

Solderability: MIL-STD-202, Method 208.

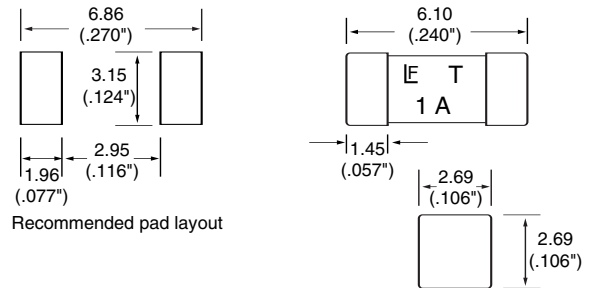
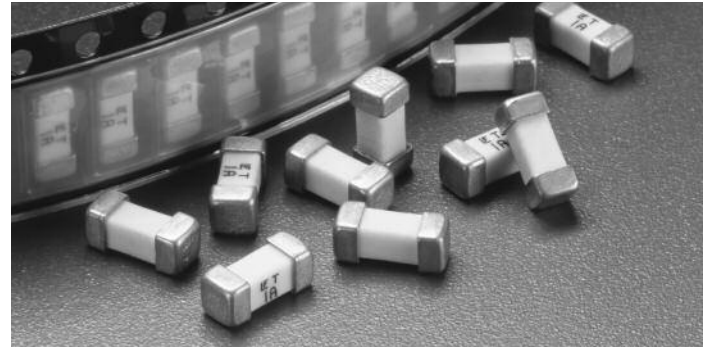
PACKAGING SPECIFICATIONS: 12mm Tape and Reel per EIA-RS481-1 (IEC 286, part3); 1,000 pieces per reel, add packaging suffix, MR; 5,000 per reel, add packaging suffix NR.

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).

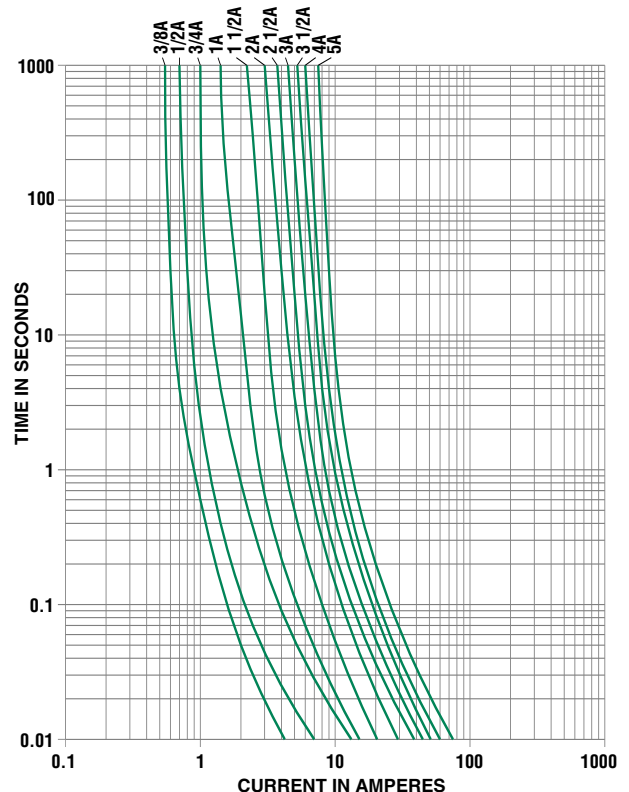
PATENTED

ORDERING INFORMATION:

Tin-Lead Plated Catalog #	Silver Plated Catalog #	Ampere Rating	Voltage Rating	Nominal Resistance Cold Ohms	Nominal Melting I ² t A ² Sec.
R452.375	0454.375	3/8	125	1.20	0.101
R452.500	0454.500	1/2	125	0.700	0.240
R452.750	0454.750	3/4	125	0.360	0.904
R452 001.	0454 001.	1	125	0.225	1.98
R452 01.5	0454 01.5	1 1/2	125	0.0930	3.65
R452 002.	0454 002.	2	125	0.0625	8.20
R452 02.5	0454 02.5	2 1/2	125	0.0450	15.0
R452 003.	0454 003.	3	125	0.0340	20.16
R452 03.5	0454 03.5	3 1/2	125	0.0224	26.53
R452 004.	0454 004.	4	125	0.0186	34.40
R452 005.	0454 005.	5	125	0.0136	53.72



Average Time Current Curves



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