

SUBMINIATURE SURFACE MOUNT

NANO²® SMF Very Fast-Acting Type



The Nano² SMF is a very small, square surface mount fuse design that exhibits electrical characteristics similar to the Littelfuse 271000 Nanofuse series.

ELECTRICAL CHARACTERISTICS:

% of Ampere Rating	Ampere Rating	Opening Time
110%	1/16–15	4 hours, Minimum
200%	1/16–10	5 seconds, Maximum
	12–15	20 seconds, Maximum

AGENCY APPROVALS: Recognized under the Components Program of Underwriters Laboratories and Certified by CSA. Approved by MITI from 1 through 5 amperes.

AGENCY FILE NUMBERS: UL E10480, CSA LR 29862.

INTERRUPTING RATINGS:

1/16 – 5	50 amperes at 125 VAC/VDC
7A – 10A	35 amperes at 125 VAC/VDC
12A – 15A	50 amperes at 65 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, Test Condition F (20 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 Plated Brass Caps.

1/8Amp and below are silver plated.

Soldering Parameters:

Wave Solder — 260°C, 10 seconds maximum

Reflow Solder — 260°C, 30 seconds maximum

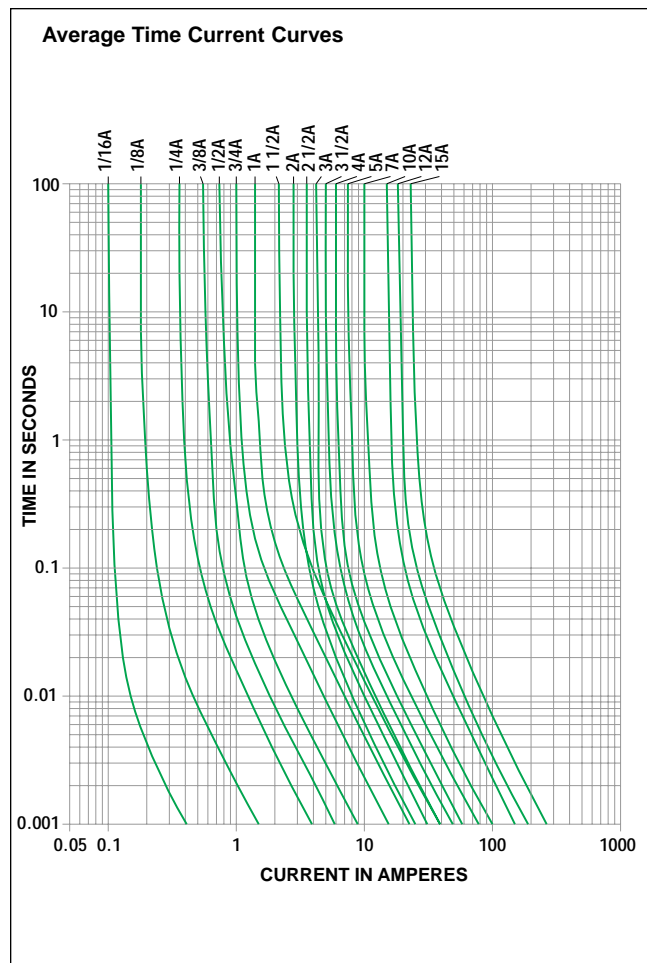
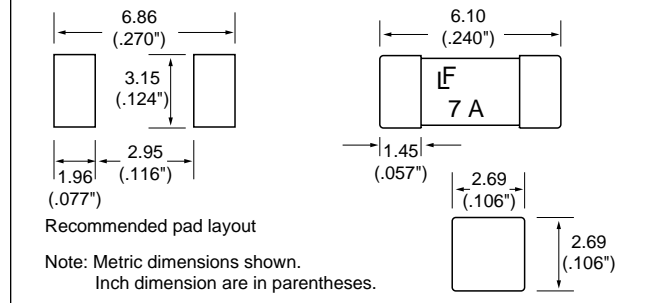
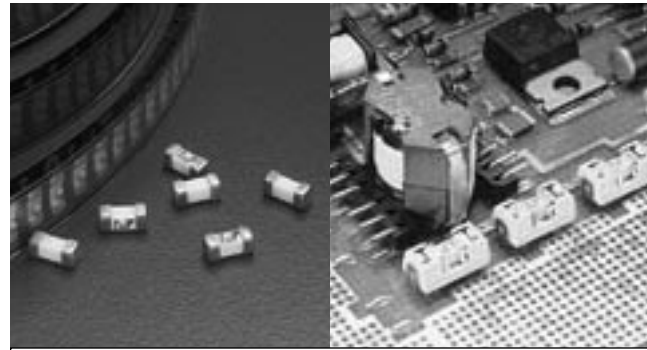
Solderability: MIL-STD-202, Method 208.

PACKAGING SPECIFICATIONS: 12mm Tape and Reel per EIA-RS481 (IEC 286, part 3); 1,000 per reel.

PATENTED

ORDERING INFORMATION:

Catalog Number	Ampere Rating	Voltage Rating	Nominal Resistance Cold Ohms	Nominal Melting I ² t A ² Sec.
R451.062	1/16	125	5.50	0.00019
R451.125	1/8	125	2.95	0.00286
R451.250	1/4	125	1.05	0.01126
R451.375	3/8	125	0.610	0.0425
R451.500	1/2	125	0.420	0.0795
R451.750	3/4	125	0.245	0.185
R451.001	1	125	0.148	0.459
R451.01.5	1½	125	0.0630	0.853
R451.002	2	125	0.0367	0.53
R451.02.5	2½	125	0.0286	1.029
R451.003	3	125	0.0227	1.65
R451.03.5	3½	125	0.0200	2.469
R451.004	4	125	0.0160	3.152
R451.005	5	125	0.0125	5.566
R451.007	7	125	0.0090	10.32
R451.010	10	125	0.0056	26.46
R451.012	12	65	0.0043	47.97
R451.015	15	65	0.0037	97.82



Refer to pg. 82 for SMF Omni-Blok Holder, Series 154 000.