

# Surface Mount Fuses

## Subminiature Surface Mount

### RoHS NANO<sup>2</sup>® UMF Fast-Acting Fuse 455 Series



- The Nano<sup>2</sup> UMF Fuse is a very small, square surface mount fuse design.
- Designed to International (IEC) Standards for use globally.
- Meets IEC 60127-4 UMF specifications for Fast-Acting Fuses
- **RoHS Compliant** version now available, use ordering suffix 'L' (see example on data sheet).

#### ELECTRICAL CHARACTERISTICS:

% of Ampere Rating	Opening Time
125%	1 hour, <b>Minimum</b>
200%	2 minutes, <b>Maximum</b>
1000%	0.001 sec, <b>Min</b> ; .01 sec <b>Max</b>

**AGENCY APPROVALS:** Listed to IEC 60127-4, Universal Modular Fuse-Links (UMF), 125V.

**AGENCY FILE NUMBERS:** UL E184655.

**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).

**Salt Spray:** MIL-STD-202, Method 101, Test Condition B.

**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 B (10 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

#### 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-RS481-1 (IEC 286, part3); 1,000 pieces per reel, add packaging suffix, MR; 5,000 per reel, add packaging suffix NR.

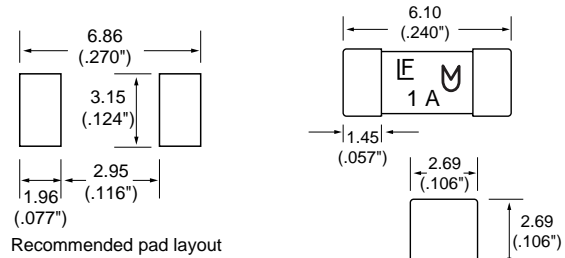
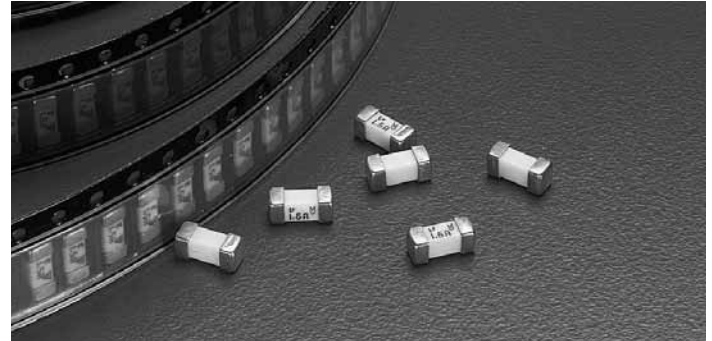
Options: For RoHS Compliant devices add the letter 'L' to end of packaging suffix. Example: 0455001.NRL (RoHS Compliant 1A, 5,000 per reel).

#### PATENTED

#### ORDERING INFORMATION:

Catalog Number	Ampere Rating	Voltage Rating	Nominal Cold Resistance (Ohms) <sup>1</sup>	Nominal Melting Pt (A <sup>2</sup> sec)
0455.400	0.4	125	0.420	0.0795
0455.500	0.5	125	0.305	0.143
0455 001.	1.0	125	0.078	0.645
0455 01.6	1.6	125	0.0532	1.060

<sup>1</sup>Measured at 10% of rated current, 25°C.



#### Average Time Current Curves

