

# Surface Mount Fuses

## Thin-Film Surface Mount

### SlimLine™ 0603 Very Fast-Acting Fuse 434 Series



- For RoHS compliant and Lead-Free designs use 467 series.
- The SlimLine 0603 fuse is an extremely small, low profile design (0603 chip size) utilizing thin-film technology to achieve precise control of electrical characteristics.
- The lower height profile produces a flat surface for improved performance in pick-and-place operations and an alternate solution for height critical applications.

#### ELECTRICAL CHARACTERISTICS:

| % of Ampere Rating | Opening Time at 25°C        |
|--------------------|-----------------------------|
| 100%               | 4 hours, <b>Minimum</b>     |
| 200%               | 5 seconds, <b>Maximum</b>   |
| 300%               | 0.2 seconds, <b>Maximum</b> |

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

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

#### INTERRUPTION RATINGS:

.25–1A                      50 A @ 32 V AC/DC  
1.25–5A                    35 A @ 32 V AC/DC

#### ENVIRONMENTAL SPECIFICATIONS:

**Operating Temperature:** –55°C to 90°C. Consult temperature derating chart on page 4. For operation above 90°C contact Littelfuse.

**Vibration:** Per MIL-STD-202F.

**Insulation Resistance (After Opening):** Greater than 10,000 ohms.

**Resistance To Soldering Heat:** Withstands 60 seconds above 200°C up to 260°C, maximum.

**Thermal Shock:** Withstands 5 cycles of –55°C to 125°C.

#### PHYSICAL SPECIFICATIONS:

**Materials:** Body: Epoxy Substrate  
Terminations: Copper/Nickel/Tin-Lead (95/5)  
Cover Coat: Conformal Coating

#### Soldering Parameters(see page 3 for typical soldering profile):

Wave Solder — 260°C, 10 seconds maximum  
Reflow Solder— 260°C, 30 seconds maximum

**PACKAGING SPECIFICATIONS:** 8mm Tape and Reel per EIA-RS481-1 (IEC 286, part 3); 5,000 per reel, add packaging suffix, NR.

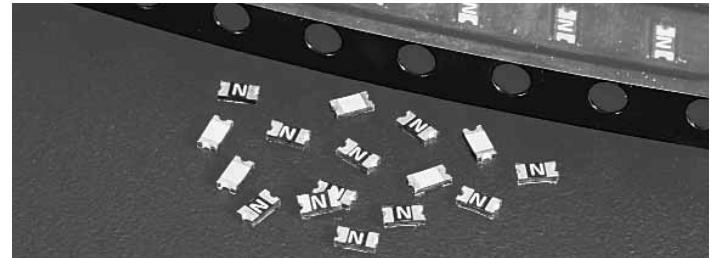
#### PATENTED:

#### ORDERING INFORMATION:

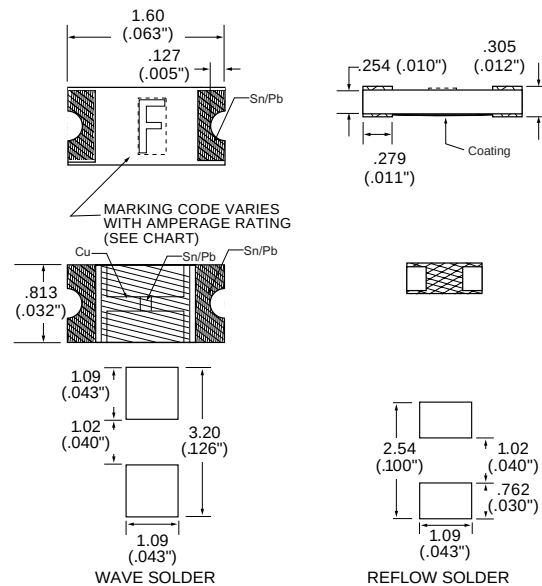
| Catalog Number | Ampere Rating | Marking Code | Voltage Rating | Nominal Resistance Cold Ohm <sup>1</sup> | Melting I <sup>2</sup> t (A <sup>2</sup> Sec.) <sup>2</sup> |
|----------------|---------------|--------------|----------------|------------------------------------------|-------------------------------------------------------------|
| 0434.250       | .25           | D            | 32             | 0.375                                    | 0.0030                                                      |
| 0434.375       | .375          | E            | 32             | 0.265                                    | 0.0053                                                      |
| 0434.500       | .5            | F            | 32             | 0.193                                    | 0.0087                                                      |
| 0434.680       | .68           | X            | 32             | 0.125                                    | 0.0109                                                      |
| 0434.750       | .75           | G            | 32             | 0.114                                    | 0.0171                                                      |
| 0434.001       | 1             | H            | 32             | 0.072                                    | 0.0210                                                      |
| 0434 1.25      | 1.25          | J            | 32             | 0.054                                    | 0.0320                                                      |
| 0434 01.5      | 1.5           | K            | 32             | 0.048                                    | 0.0526                                                      |
| 0434 1.75      | 1.75          | L            | 32             | 0.039                                    | 0.0661                                                      |
| 0434 002       | 2             | N            | 32             | 0.036                                    | 0.104                                                       |
| 0434 02.5      | 2.5           | O            | 32             | 0.028                                    | 0.175                                                       |
| 0434 003       | 3             | P            | 32             | 0.023                                    | 0.198                                                       |
| 0434 03.5      | 3.5           | R            | 32             | 0.019                                    | 0.265                                                       |
| 0434 004       | 4             | S            | 32             | 0.017                                    | 0.352                                                       |
| 0434 005       | 5             | T            | 32             | 0.013                                    | 1.297                                                       |

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

<sup>2</sup> Measured at rated voltage.



#### Reference Dimensions:



#### Average Time Current Curves

