

THIN-FILM SURFACE MOUNT

SlimLine 0603 Very Fast-Acting Thin-Film Type 434 Series



- The SlimLine 0603 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.
- Mounting pad and electrical specification are identical to the popular 431 Series specifications.

ELECTRICAL CHARACTERISTICS:

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

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

AGENCY FILE NUMBERS: UL E10480, CSA LR 29862.

INTERRUPTING 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.

Shelf Life (Solderability): 1 year min.

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:

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

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

PATENTS: Patent Pending

ORDERING INFORMATION:

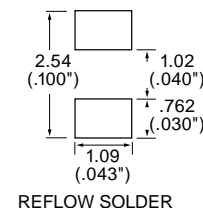
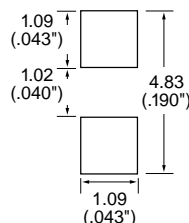
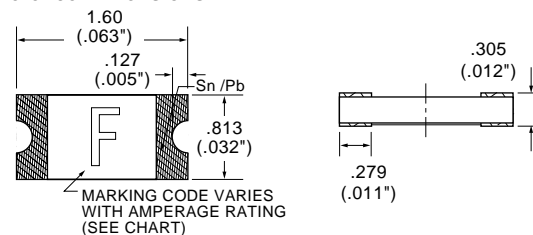
| Catalog Number | Ampere Rating | Marking Code | Voltage Rating | Nominal Resistance Cold Ohm ¹ | Melting I ² t (A ² Sec.) |
|----------------|---------------|--------------|----------------|--|--|
| 0434.250 | .25 | D | 32 | 0.375 | 0.0030 |
| 0434.375 | .375 | E | 32 | 0.265 | 0.0053 |
| 0434.500 | .5 | F | 32 | 0.193 | 0.0087 |
| 0434.750 | .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 |

¹Measured at 10% of rated current, 25°C.

²Measured at rated voltage.



Reference Dimensions:



WAVE SOLDER

REFLOW SOLDER

Average Time Current Curves

