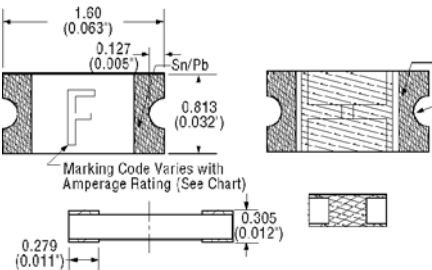


SlimLine 0603  
Very Fast-Acting  
Thin-Film Type  
434 Series

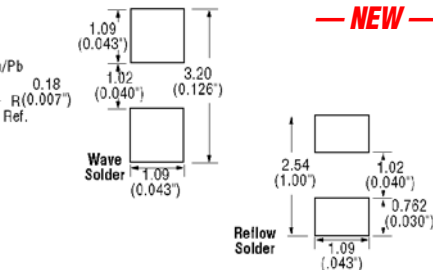
Electrical Characteristics

| % of Ampere Rating | Opening Time at 25°C |
|--------------------|----------------------|
| 100%               | 4.0 hours, Minimum   |
| 200%               | 5.0 seconds, Maximum |
| 300%               | 0.2 seconds, Maximum |

► 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

**Agency Approvals:** Recognized under the Components Program of Underwriters Laboratories and certified by CSA. **Agency File Numbers:** UL E10480, CSA LR 29862. **Interrupting Ratings:** 0.25-1 A — 50 A @ 32 VAC/VDC; 1.25-5 A — 35 A @ 32 VAC/VDC. **Environmental Specifications.** **Operating Temperature:** -55°C to 90°C. For operation above 90°C contact your local Allied sales representative. **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 Specification.** **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:** 8 mm tape and reel per EIA-RS481 (IEC 286, part 3); 5,000 per reel, add packaging suffix, NR. **Patents:** Patent pending. **Voltage Rating:** 32.

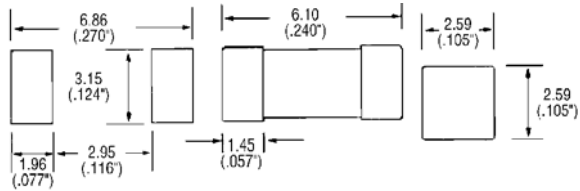
| Stock No. | Mfr.'s Type | Ampere Rating | Marking Code | Nominal Resistance Cold Ohm* | Melting Pt (A Sec.)† | PER PK./100 |       |       |
|-----------|-------------|---------------|--------------|------------------------------|----------------------|-------------|-------|-------|
|           |             |               |              |                              |                      | 1-4         | 5-9   | 10-Up |
| 846-0808  | 0434.250    | 1/4           | D            | 0.375                        | 0.0030               | 44.88       | 41.14 | 37.98 |
| 846-0810  | 0434.375    | 3/4           | E            | 0.265                        | 0.0053               | 44.88       | 41.14 | 37.98 |
| 846-0812  | 0434.500    | 1/2           | F            | 0.193                        | 0.0087               | 44.88       | 41.14 | 37.98 |
| 846-0814  | 0434.750    | 3/4           | G            | 0.114                        | 0.0171               | 44.88       | 41.14 | 37.98 |
| 846-0816  | 0434001.    | 1             | H            | 0.072                        | 0.0210               | 44.88       | 41.14 | 37.98 |
| 846-0817  | 04341.25    | 1 1/4         | J            | 0.054                        | 0.0320               | 44.88       | 41.14 | 37.98 |
| 846-0818  | 043401.5    | 1 1/2         | K            | 0.048                        | 0.0696               | 44.88       | 41.14 | 37.98 |

\*Measured at 10% of rated current, 25°C. †Measured at rated voltage.

| Stock No. | Mfr.'s Type | Ampere Rating | Marking Code | Nominal Resistance Cold Ohm* | Melting Pt (A Sec.)† | PER PK./100 |       |       |
|-----------|-------------|---------------|--------------|------------------------------|----------------------|-------------|-------|-------|
|           |             |               |              |                              |                      | 1-4         | 5-9   | 10-Up |
| 846-0819  | 04341.75    | 1 1/4         | L            | 0.039                        | 0.0661               | 44.88       | 41.14 | 37.98 |
| 846-0820  | 0434002.    | 2             | N            | 0.036                        | 0.1040               | 44.88       | 41.14 | 37.98 |
| 846-0822  | 04342.50    | 2 1/2         | O            | 0.028                        | 0.1750               | 44.88       | 41.14 | 37.98 |
| 846-0824  | 0434003.    | 3             | P            | 0.023                        | 0.1980               | 44.88       | 41.14 | 37.98 |
| 846-0828  | 0434004.    | 4             | S            | 0.017                        | 0.4200               | 44.88       | 41.14 | 37.98 |
| 846-0830  | 0434005.    | 5             | T            | 0.013                        | 0.6000               | 44.88       | 41.14 | 37.98 |
| —         | —           | —             | —            | —                            | —                    | —           | —     | —     |

\*Measured at 10% of rated current, 25°C. †Measured at rated voltage.

Nano<sup>2™</sup> Fuses



Nano<sup>2™</sup> Very Fast-Acting Type Fuses

Recognized under the Components Program of Underwriters Laboratories and Certified by CSA. Approved by MITI from 1 through 5 amperes. **Operating Temperature:** -55°C to 125°C. **Shock:** MIL-STD-202, Method 213, Test Condition 1 (100 Gs peak for 6 milliseconds). **Vibration:** MIL-STD-202, Method 201 (10-55 Hz, 0.06 in. total excursion). **Salt Spray:** MIL-STD-202, Method 101, Test Conditions B (48 hours). **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 Conditions 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). **Materials:** Ceramic Body/Tin-Lead Alloy Plated Brass Caps. **Soldering Parameters.** **Wave Solder:** 500°F (260°C), 10 sec. **Infrared:** 500°F (260°C), 30 sec. **Solderability:** MIL-STD-202, Method 208. **Voltage Rating:** 125. **Agency File Numbers:** UL E10480, CSA LR 29862.

| Stock No. | Mfr.'s Type | Ampere Rating | Nominal Resistance Cold Ohms | Nominal Melting Pt A° Sec. | PER PK./100 |        |        |
|-----------|-------------|---------------|------------------------------|----------------------------|-------------|--------|--------|
|           |             |               |                              |                            | 1-3         | 4-6    | 7-9    |
| 845-5010  | R451.062    | 1/16          | 5.5000                       | 0.00019                    | 108.38      | 96.33  | 86.70  |
| 845-5011  | R451.125    | 1/8           | 1.7000                       | 0.00286                    | 108.38      | 96.33  | 86.70  |
| 845-5012  | R451.250    | 1/4           | 1.0500                       | 0.01126                    | 132.60      | 120.55 | 110.50 |
| 845-5013  | R451.375    | 3/8           | 0.6100                       | 0.04250                    | 67.32       | 61.20  | 56.10  |
| 845-5014  | R451.500    | 1/2           | 0.4200                       | 0.07950                    | 95.61       | 85.00  | 76.49  |
| 845-5015  | R451.750    | 3/4           | 0.2450                       | 0.18500                    | 132.60      | 120.55 | 110.50 |
| 845-5016  | R451.001    | 1             | 0.1530                       | 0.45900                    | 83.38       | 74.12  | 66.92  |
| 845-5017  | R451.01.5   | 1 1/2         | 0.0630                       | 0.85300                    | 132.60      | 120.55 | 110.50 |
| 845-5018  | R451.002    | 2             | 0.0367                       | 0.53000                    | 88.23       | 78.43  | 70.81  |
| 845-5019  | R451.02.5   | 2 1/2         | 0.0286                       | 1.02900                    | 70.79       | 58.99  | 54.45  |
| 845-5020  | R451.003    | 3             | 0.0227                       | 1.65000                    | 132.60      | 120.55 | 110.50 |
| 845-5021  | R451.004    | 4             | 0.0160                       | 3.15200                    | 132.60      | 120.55 | 110.50 |
| 845-5023  | R451.005    | 5             | 0.0125                       | 5.56600                    | 52.02       | 48.02  | 44.59  |
| 845-5024  | R451.007    | 7             | 0.0090                       | 10.32000                   | 83.38       | 74.12  | 66.92  |
| 845-7025  | R451.010    | 10            | 0.0056                       | 26.46000                   | 83.38       | 74.12  | 66.92  |
| 845-7026  | R451.012*   | 12            | 0.0043                       | 47.97000                   | 91.28       | 84.99  | 80.79  |
| 845-7027  | R451.015*   | 15            | 0.0037                       | 97.82000                   | 210.73      | 191.57 | 175.61 |

\*Voltage Rating: 65. Tape and reel available.

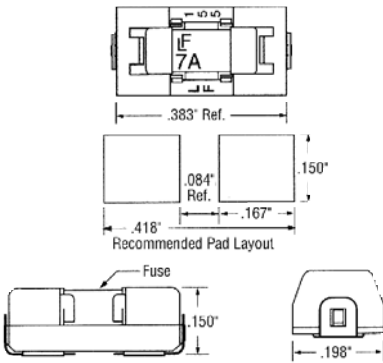
Nano<sup>2™</sup> Slo-Blo® Type Fuses

Recognized under the Components Program of Underwriters Laboratories and Certified by CSA. **Interrupting Ratings:** 50 amperes at 125 VAC. 50 amperes at 125 VDC. **Operating Temperature:** -55°C to 125°C. **Shock:** MIL-STD-202, Method 201 (10-55 Hz, 0.06 in. total excursion). **Salt Spray:** MIL-STD-202, Method 101, Test Condition B (48 hours). **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°). **Materials:** Ceramic Body/Tin-Lead Alloy Plated Brass Caps. **Soldering Parameters.** **Wave Solder:** 500°F (260°C), 3 seconds, max. **Infrared Reflow:** 446°F (230°C) max. **Solderability:** MIL-STD-202, Method 208. **Marking:** The 452 000 series Slo-Blo fuse marking includes the letter "T" to designate time delay characteristics. **Voltage Rating:** 125. **Agency File Numbers:** UL E10480, CSA LR 29862.

| Stock No. | Mfr.'s Type | Ampere Rating | Nominal Resistance Cold Ohms | Nominal Melting Pt A° Sec. | PER PK./100 |        |       |
|-----------|-------------|---------------|------------------------------|----------------------------|-------------|--------|-------|
|           |             |               |                              |                            | 1-3         | 4-6    | 7-9   |
| 845-5040  | R452.001    | 1             | 0.2700                       | 1.98                       | 116.79      | 103.81 | 93.43 |
| 845-5041  | R452.01.5   | 1 1/2         | 0.1160                       | 3.65                       | 113.22      | 100.64 | 90.58 |
| 845-5042  | R452.002    | 2             | 0.0760                       | 8.20                       | 113.22      | 100.64 | 90.58 |
| 845-5044  | R452.003    | 3             | 0.0414                       | 20.16                      | 113.22      | 100.64 | 90.58 |
| 845-5046  | R452.004    | 4             | 0.0186                       | 34.40                      | 113.22      | 100.64 | 90.58 |

Tape and reel available.

Omni-Blok® SMF Fuse Block  
Molded Base and Fuse



Recognized under the Components Program of Underwriters Laboratories and Certified by CSA. **Electricals:** 7 amperes, 125 volts. **Molded Parts:** Thermoplastic (94 V0). **Terminals:** Tin/Lead Alloy Plated Beryllium Copper. **Ambient Temperature:** -55°C to 125°C. **Shock:** MIL-STD-202, Method 213, Test Condition 1 (100 Gs peak for 6 milliseconds). **Vibration:** MIL-STD-202, Method 201 (10-55Hz). **Thermal Shock:** MIL-STD-202, Method 107, Condition A (200 cycles — 30 minutes at -55°C, 30 minutes at 125°C). **Soldering Parameters (Fuse Installed).** **Infrared:** 500°F (260°C), 30 sec.; 445°F (230°C), 30 sec. **Solderability:** MIL-STD-202, Method 208. Each base comes with fuse.

| Stock No. | Mfr.'s Type | Ampere Rating | PER PK./100 |        |        |
|-----------|-------------|---------------|-------------|--------|--------|
|           |             |               | 1-3         | 4-6    | 7-9    |
| 845-5060  | 154.062     | 1/16          | 106.57      | 102.00 | 95.20  |
| 845-5064  | 154.500     | 1/2           | 164.22      | 149.29 | 136.85 |
| 845-5065  | 154.750     | 3/4           | 261.32      | 237.57 | 217.77 |
| 845-5066  | 154.001     | 1             | 290.13      | 261.12 | 237.38 |
| 845-5067  | 154.01.5    | 1 1/2         | 159.44      | 134.64 | 121.18 |
| 845-5068  | 154.002     | 2             | 159.44      | 134.64 | 121.18 |
| 845-5070  | 154.003     | 3             | 159.44      | 134.64 | 121.18 |
| 845-5072  | 154.004     | 4             | 159.44      | 134.64 | 121.18 |
| 845-5075  | 154.005     | 5             | 261.32      | 237.57 | 217.77 |
| 845-5074  | 154.007     | 7             | 166.70      | 140.77 | 126.69 |

Note: See R451 Series for fuse replacements. Tape and reel available.