



Littelfuse Inc.,
800 E. Northwest Highway
Des Plaines, IL 60016-3096

Subject: 431 Obsolescence

December 30th, 2002

To Whom It May Concern,

At this time Littelfuse is announcing the last time buy program for the 431 Series (Fast Acting 0603 Thin Film Fuse). Two new series the lower profile 434 SlimLine™ series and the new SlimLine™ Lead Free 467 Series are replacing the 431. The changes in the height profiles of the new devices were introduced to improve performance in pick-and-place operations and to provide an alternate solution for height critical applications. However, the electrical performances of each of these series are similar – see link below for specifications. As with any product, we have the 434 and 467 available for sampling.

<http://www.littelfuse.com/PDFs/Products/434.pdf>

<http://www.littelfuse.com/PDFs/Products/467.pdf>

Littelfuse will accept last time buy orders for the 431 series until March 31st, 2003. At that time, Littelfuse will manufacture all last time buy orders. If requested, Littelfuse will ship partial orders as product is in production. However, we will not be holding or partial shipping any completed customer orders. All orders are to be considered non-cancelable and non-returnable.

If you have any questions please contact your Littelfuse sales representative or the under signed.

Best regards,
Mary O'Reilly

Mary O'Reilly
Marketing Engineer
moreilly@littelfuse.com



431 / 434 / 467 Comparison

| Series Name | 431 Series | 434 Series | 467 Series |
|-----------------------------------|--|--|--|
| Fuse Type | Thin film Very Fast Acting 0603 | SlimLine™ Thin Film 0603 Very Fast Acting | Lead Free SlimLine™ 0603 Thin Film Very Fast Acting |
| Available amp ratings | .25 to 5 | .25 to 5 | .25 to 5 |
| Electrical Characteristics | | | |
| Opening time | 4 hours, minimum @ 100% rating 0.2 seconds maximum @ 300% | 4 hours, minimum @ 100% rating 0.2 seconds maximum @ 300% | 4 hours, minimum @ 100% rating 0.2 seconds maximum @ 300% |
| Interrupting Ratings | .25 – 1A 1 – 5A | 50A @ 32 VAC/VDC 35A @ 32 VAC/VDC | 50A @ 32 VAC/VDC 35A @ 32 VAC/VDC |
| Agency Approval | UL E10480 CSA LR 29862 | UL E10480 CSA LR 29862 | UL E10480 CSA LR 29862 |



431 / 434 / 467 Comparison

| Series Name | 431 Series | 434 Series | 467 Series |
|--|----------------------------|----------------------------|------------------------------|
| Normal Melting I²T A²Sec. | Equivalent | Equivalent | Equivalent |
| Environmental specifications | Equivalent | Equivalent | Equivalent |
| Insulation Resistance (After Opening) | Greater than 10,000 ohms | Greater than 10,000 ohms | Greater than 10,000 ohms |
| Soldering Parameters | | | |
| Reflow | 260°C, 30 seconds maximum | 260°C, 30 seconds max. | 260°C, 30 seconds max. |
| Wave | -- | 260°C, 10 seconds max. | 260°C, 10 seconds max. |
| Physical Dimensions (mm) | | | |
| Length | 1.6 | 1.6 | 1.6 |
| Width | 0.813 | 0.813 | 0.813 |
| Height | 1.04 | 0.305 | 0.305 |
| Pad size (reflow) | 1.09 x 0.76 | 1.09 x 0.76 | 1.09 x 0.76 |
| Pad spacing | 1.02 | 1.02 | 1.02 |
| Materials | | | |
| Body | Epoxy Substrate | Epoxy Substrate | Advanced High Temp Substrate |
| Terminations | Copper / Nickel / Tin-Lead | Copper / Nickel / Tin-Lead | Copper / Nickel / 100% Tin |
| Element Cover Coat | Conformal Coating | Conformal Coating | Conformal Coating |