



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
<b>Fuse Type</b>	Thin film Very Fast Acting 0603	SlimLine™ Thin Film 0603 Very Fast Acting	Lead Free SlimLine™ 0603 Thin Film Very Fast Acting
<b>Available amp ratings</b>	.25 to 5	.25 to 5	.25 to 5
<b>Electrical Characteristics</b>			
<b>Opening time</b>	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%
<b>Interrupting Ratings</b>	.25 – 1A  1 – 5A	50A @ 32 VAC/VDC  35A @ 32 VAC/VDC	50A @ 32 VAC/VDC  35A @ 32 VAC/VDC
<b>Agency Approval</b>	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
<b>Normal Melting I<sup>2</sup>T A<sup>2</sup>Sec.</b>	Equivalent	Equivalent	Equivalent
<b>Environmental specifications</b>	Equivalent	Equivalent	Equivalent
<b>Insulation Resistance</b> (After Opening)	Greater than 10,000 ohms	Greater than 10,000 ohms	Greater than 10,000 ohms
<b>Soldering Parameters</b>			
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.
<b>Physical Dimensions (mm)</b>			
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
<b>Materials</b>			
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