

# **430 Series Fuse**







# **Agency Approvals**

Agency	Agency File Number	Ampere Range	
. <b>9</b> 1	E10480	500mA - 3A	
<b>⊕</b> ®	LR29862	500mA - 3A	

#### **Electrical Characteristics for Series**

% of Ampere Rating	Opening Time at 25°C	
100%	4 hours, Minimum	
200%	1 sec., Min.; 120 sec., Max.	
300%	0.1 sec., Min.; 3 sec., Max	
800%	0.002 sec., Min.; .05 sec., Max.	

## **Description**

The 430 series time-lag (Slo-Blo) surface mount fuse series is a small (1206 size) thin-film device designed for secondary protection of circuits used in space constrained applications such as hand-held portable electronic devices.

For RoHS compliant and lead-free design, please refer to the Littelfuse 468 series thin film fuse.

#### **Features**

- For RoHS compliant and Lead-Free designs use 468 series
- Time delay feature withstands high in-rush currents and prevents nuisance openings.
- · Package is visually distinct from fastacting version for easy identification.
- Top side marking allows visual verification of amperage rating.

### **Applications**

Secondary protection for space constrained applications such as:

- Cell phones
- Battery packs
- Digital cameras
- DVD players
- Hard disk drives.

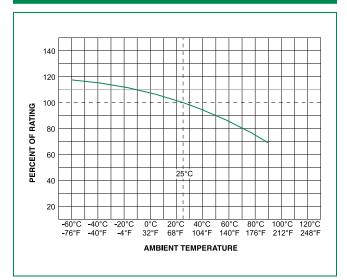
# **Electrical Specifications by Item**

Ampere Max			Nominal Cold	Nominal	Agency Approvals		
Rating (A)	Amp Code	Voltage Rating (V)	Interrupting Resistance (Ohms)		Melting I <sup>2</sup> t (A <sup>2</sup> sec)	<b>.</b> 7U	<b>®</b>
0.500	.500	63	50 amperes at 63 VAC/VDC	0.2500	0.0305	Х	Х
1.00	001.	63		0.09700	0.1440	×	×
1.50	01.5	63	V/ (0, V 2 0	0.05600	0.2980	X	Х
2.00	002.	63	35 amperes at 63 VAC/VDC	0.03900	0.4940	x	х
3.15	003.	32	50 amperes at 63 VAC/VDC	0.02000	1.3300	х	х

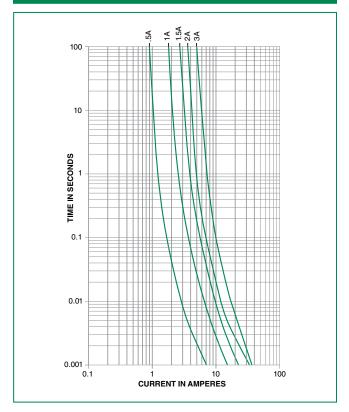
- 1. Measured at 10% of rated current, 25°C.
- 2. Measured at rated voltage



### **Temperature Rerating Curve**

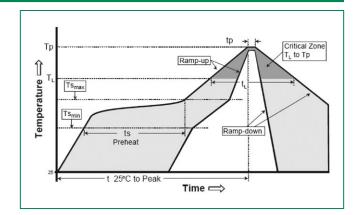


### **Average Time Current Curves**



# **Soldering Parameters - Wave Soldering**

Reflow Condition		Pb – Free assembly	
Pre Heat	-Temperature Min (T <sub>s(min)</sub> )	150°C	
	-Temperature Max (T <sub>s(max)</sub> )	200°C	
	-Time (Min to Max) (t <sub>s</sub> )	60 – 180 secs	
Average ramp up rate (Liquidus Temp (T <sub>L</sub> ) to peak		5°C/second max	
T <sub>S(max)</sub> to T <sub>L</sub> - Ramp-up Rate		5°C/second max	
Reflow	-Temperature (T <sub>L</sub> ) (Liquidus)	217°C	
	-Temperature (t <sub>L</sub> )	60 – 150 seconds	
PeakTemperature (T <sub>p</sub> )		250 <sup>+0/-5</sup> °C	
Time within 5°C of actual peak Temperature (t <sub>p</sub> )		20 - 40 seconds	
Ramp-down Rate		5°C/second max	
Time 25°C to peakTemperature (T <sub>P</sub> )		8 minutes Max.	
Do not exceed		260°C	



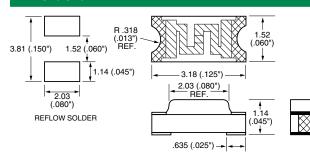


### **Product Characteristics**

Materials	Body: Epoxy Substrate Terminations: 95% Tin / 5% Lead over Nickel over Copper Element Cover Coat: Conformal Coating	
Operating Temperature	– 55°C to 90°C. Consult temperature rerating curve chart. For operation above 90°C contact Littelfuse.	
Humidity MIL-STD-202F Method 103B Condition D		
Thermal Shock	Withstands 5 cycles of – 55°C to 125°C	

Vibration	Withstands 10-55 Hz per MIL-STD-202F, Method 201A and 10-2000 Hz at 20 G's per MIL-STD-202F, Method 204D, Condition D	
Insulation Resistance (After Opening)	Greater than 10,000 ohms	
Resistance to Soldering Heat	Withstands 60 seconds above 200°C and up to 260°C, maximum	

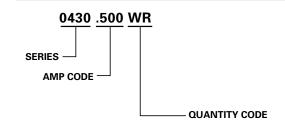
#### **Dimensions**



# **Part Marking System**

Amp Code	Marking Code	
.500	F	
001.	Н	
01.5	K	
002.	N	
003.	Р	

# **Part Numbering System**



# **Packaging**

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
8mm Tape and Reel	EIA RS-481-2 (IEC 286, part 3)	3000	WR