

Surface Mount Fuses

Thin Film > 1206 Size > Very Fast-Acting > 429 Series

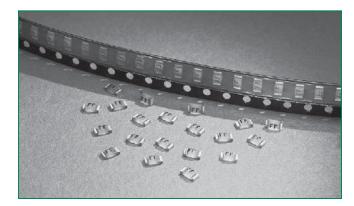
RoHS (Po)



429 Series Fuse







Agency Approvals

AGENCY	AGENCY FILE NUMBER	AMPERE RANGE	
<i>U</i> R _®	E10480	125MA - 7A	
®	LR29862	125MA - 7A	

Electrical Characteristics for Series

% of Ampere Rating	OpeningTime at 25°C
100%	4 hours, Minimum
200%	5 sec., Maximum
300%	0.2 sec., Maximum

Description

The 429 Series Fast-Acting SMF is a small (1206 size) thinfilm device designed for secondary protection of circuits used in space constrained applications such as hand-held portable electronic devices.

This series is 100% lead-free and meets the requirements of the RoHS directive.

Features

- · RoHS compliant and Lead-Free 7A device available-add 'L' suffix to catalog number
- For new designs up to 5A please consult the 433 or 466 Series

Applications

Secondary protection for space constrained applications such as:

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

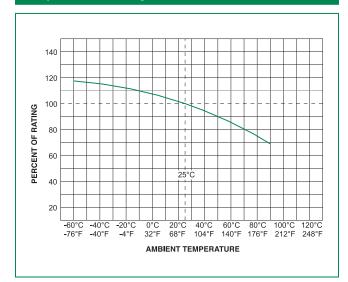
Electrical Specifications by Item

Ampere Rating	, Amp Voltage Interrupting F		Nominal Cold Resistance	Nominal Melting	Agency Approvals		
(A)	Code	Rating (V)	Rating	(Ohms)	I ² t (A ² sec)	1 7.	®
7.00	007.	24	35 amperes @ voltage, VAC/VDC	0.00925	3.6000	Х	X
7.00	007.	24		0.00925	3.6000	Х	Х

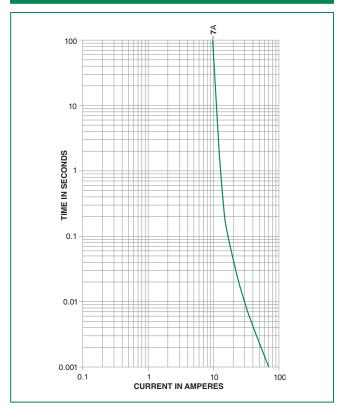
- 1. Measured at 10% of rated current, 25°C.
- 2. Measured at rated voltage.



Temperature Rerating Curve



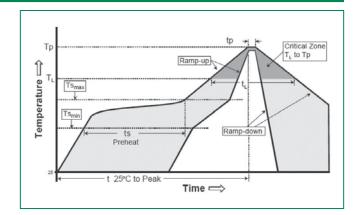
Average Time Current Curves



Soldering Parameters

Reflow Co	ndition	Pb – Free assembly	
	-Temperature Min (T _{s(min)})	150°C	
Pre Heat	-Temperature Max (T _{s(max)})	200°C	
	-Time (Min to Max) (t _s)	60 – 180 secs	
Average ramp up rate (Liquidus Temp (T_L) to peak		5°C/second max	
T _{S(max)} to T _L	- Ramp-up Rate	5°C/second max	
Reflow	-Temperature (T _L) (Liquidus)	217°C	
Reliow	-Temperature (t _L)	60 – 150 seconds	
PeakTemp	perature (T _P)	250 ^{+0/-5} °C	
Time with	in 5°C of actual peak ure (t _p)	20 – 40 seconds	
Ramp-down Rate		5°C/second max	
Time 25°C	to peakTemperature (T _P)	8 minutes Max.	
Do not exceed		260°C	





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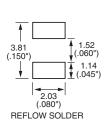
Product Characteristics

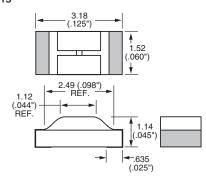
Materials	Body: Epoxy Substrate Terminations - Standard Device (429): 95% Tin / 5% Lead over Nickel over Copper Terminations, RoHS Compliant Device (429L): 100% Tin over Nickel over Copper Element Cover Coat: Conformal Coating NOTE: Do not use alcohol-based cleaners or solvents with 429 Series Thin-Film Fuses as it may damage the coating.	
Operating Temperature	– 55°C to 90°C. Consult temperature rerating chart. For operation above 90°C contact Littelfuse.	
Thermal Shock	Withstands 5 cycles of – 55°C to 125°C	

Humidity	MIL-STD-202F, Method 103B Condition D		
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	MIL-STD-202G, Method 210F, Condition D		

Dimensions

RECOMMENDED PAD LAYOUTS

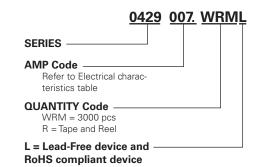




Part Marking System

Series	Marking Code
429	FU
429L	7

Part Numbering System



Example:

1.5 amp product is 0429 **01.5** WRML (7 amp product shown above).

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
Tape & Reel – 8mm tape	EIA RS-481-1 (IEC 286, part 3)	3000	WRM

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

<u>04291.75WRM</u> <u>0429.500WRM</u> <u>0429003.WRM</u> <u>0429005.WRM</u> <u>04291.25WRM</u> <u>042901.5WRM</u> <u>0429002.WRM</u> 0429.200WRM 0429.250WRM 0429.750WRM 0429001.WRM 0429.125WRM 0429.375WRM