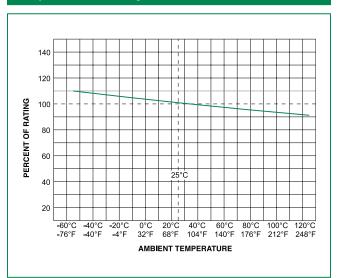


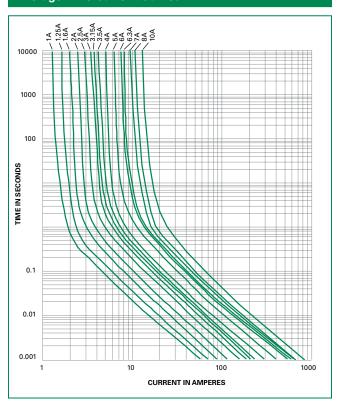
### **Temperature Re-rating Curve**



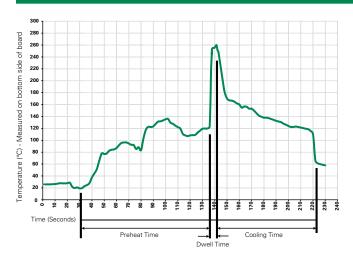
Note:

Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

## **Average Time Current Curves**



# **Soldering Parameters - Wave Soldering**



#### **Recommended Process Parameters:**

Wave Parameter	Lead-Free Recommendation		
Preheat:			
(Depends on Flux Activation Temperature)	(Typical Industry Recommendation)		
Temperature Minimum:	100°C		
Temperature Maximum:	150°C		
Preheat Time:	60-180 seconds		
Solder Pot Temperature:	260°C Maximum		
Solder Dwell Time:	2-5 seconds		

## **Recommended Hand-Solder Parameters:**

Solder Iron Temperature: 350°C +/- 5°C Heating Time: 5 seconds max.

Note: These devices are not recommended for IR or Convection Reflow process.

Pa	- 1				
	~	<i>(</i> - 2)	al	m	

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
233 Series				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXE	N/A
Reel and Tape	EIA 296-E	1000	MRET1	T1=53mm (2.087")
Bulk	N/A	1000	MXB	N/A



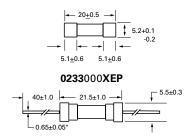
#### **Product Characteristics**

Materials	Body: Glass Cap: Nickel-plated brass Leads: Tin-plated Copper
Terminal Strength	MIL-STD-202, Method 211, Test Condition A
Solderability	MIL-STD-202 Method 208
Product Marking	Cap 1: Brand logo, current and voltage rating Cap 2: Series and agency approval markings
Packaging	Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel)

Operating Temperature	−55°C to +125°C
Thermal Shock	MIL-STD-202, Method 107, Test Condition B: (5 cycles –65°C to +125°C)
Vibration	MIL-STD-202, Method 201
Humidity	MIL-STD-202, Method 103, Test Condition A. high RH (95%) and elevated temp (40°C) for 240 hours
Salt Spray	MIL-STD-202, Method 101, Test Condition B

#### **Dimensions**

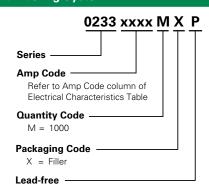




Notes: \* Ratings above 6.3A have 0.8±0.05 diameter lead.

All dimensions in mm

# **Part Numbering System**



#### **Recommended Accessories**

Accessory Type	Series	Description	Max Application Voltage	Max Application Amperage
	345_ISF	Panel Mount Shock-Safe Fuseholder		10
Holder	<u>345</u>	Shock-Safe Fuseholder with PC Mount, Solder Mount and Panel Mount options		20
	830	PC Mount Shock-Safe Miniature Fuseholder		16
	<u>520</u>	Metric OMNI-BLOK® Fuse Block		10
Block <u>646</u> <u>658</u>	<u>646</u>	PC Mount Miniature Fuse Block	250	6.3
	<u>658</u>	Surface Mount Miniature Fuse Block		10
	520_W	PC Mount Miniature Fuse Clip		6.3
Clip	<u>111</u>	PC Board Mount Fuse Clip		10
	<u>445</u>	PC Board Mount Fuse Clip		10

- Notes:

  1. Do not use in applications above rating.

  2. Please refer to fuseholder data sheet for specific re-rating information.
- 3. Please contact factory for applications greater than the max voltage and amperage shown.

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at:  $\underline{www.littelfuse.com/disclaimer-electronics}.$ 

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Specifications are subject to change without notice.

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