

# 525 series, Lead-free 3AB Fuse







Agency	Agency File Number	Ampere Range	
c <b>91</b> 0s	E10480	15A-30A	

# **Description**

The 525 series is AECQ-Compliant, 450VDC rated ceramic fuse with remarkable interrupting rating, which is well suited for circuit protection in high energy applications

### **Features**

- Available in cartridge and axial lead form
- RoHS compliant and Lead-free
- Compact form factor of 6.3x32mm
- High Interrupting Rating
- Meet Littelfuse's automotive qualifications\*

# **Applications**

- On board charger
- UPS

# **Electrical Characteristics**

% of Ampere Rating	Opening Time
100%	4hours, Min
200%	30mins, Max
300%	10sec , Max

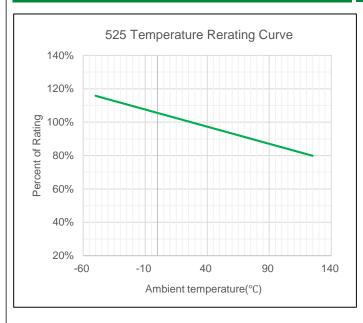
# **Electrical Characteristic Specifications**

Amp Code	Amp Rating(A)	Max. Voltage Rating(V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Agency Approvals
015.	15		10KA@450VDC -	0.0085	55	х
020.	20	450\/DC		0.0049	210	Х
025.	25	450VDC		0.0038	320	Х
030.	30			0.0031	580	Х

<sup>\*-</sup> Largely based on Littelfuse internal AEC-Q200 test plan



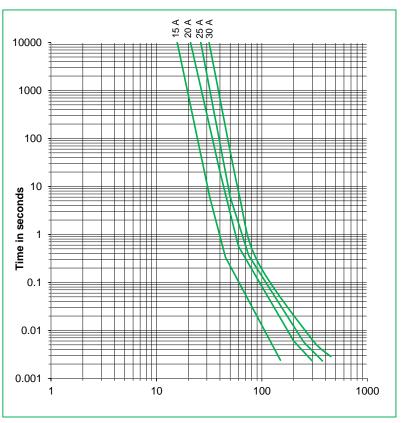
### Temperature Rerating Curve



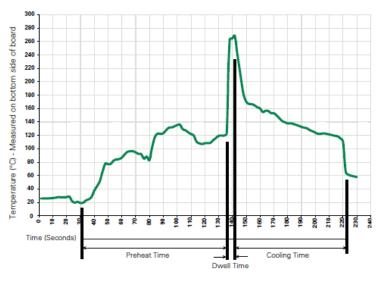
#### Note:

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

### Average Time Current Curve



# 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 DwellTime:	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.



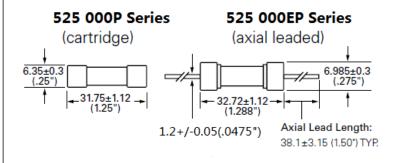
#### **Product Characteristics**

Materials	Body: Ceramic Cap: Nickel-plated brass Leads: Tin-plated copper	
Terminal Strength	Mil-STD-202G, Method 211A, Test condition A	
Solderability	Reference MIL-STD-202 method 208	
Product Marking	Cap 1: Brand logo, current and voltage ratings Cap 2: Agency approval marks	

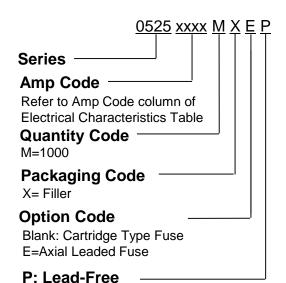
Operating Temperature	-55°C to +125°C
Thermal Shock	MIL-STD-202G, Method 107G, Test condition B
Vibration	MIL-STD-202G, Method 201A
Moisture Resistance	MIL-STD-202G, Method 103B, Test condition A
Salt Spray	MIL-STD-202G, Method 101E, Test condition B

#### **Dimensions**

# Part Numbering System



15A: Φ1.0mm lead wire 20A-30A: Φ1.2mm lead wire



## Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size	
525 Series					
Bulk	N/A	1000	MX	N/A	
Bulk	N/A	1000	MXE	N/A	