

### 504 Series, 6.3x32mm Fuse



#### Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	20A - 30A
	N/A	20A - 30A

#### Description

The 504 Series is a 420VDC 420VDC and 500VAC rated ceramic fuse with a 400A and 200A and 200A interrupting rating, respectively, in a compact 6.3 x 32mm package, The 504 Series is well suited for circuit, for circuit protection in high energy applications.

#### Features

- In accordance with Underwriters Laboratories Standard UL 248-14
- Available in cartridge and axial lead form and with various lead forming dimensions.
- RoHS compliant and Lead-free
- Compact form factor of 6.3mm x 32mm

#### Applications

- High Voltage DC power application

#### Electrical Characteristic Specifications by Item

Amp Code	Ampere Rating (A)	Max. Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (mOhms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Agency Approvals	
020.	20	420VDC 500VAC	400A@420VDC 1500A@250VAC 200A@500VAC	5.8	760	x	x
025.	25			3.95	1500	x	x
030.	30			3.1	2600	x	x

#### Electrical Characteristics for Series

% of Ampere Rating	Ampere Rating	Opening Time
100%	20A - 30A	4 Hours, Minimum
135%		1 Hour, Maximum
200%		120 Seconds, Maximum

#### Additional Information



Datasheet

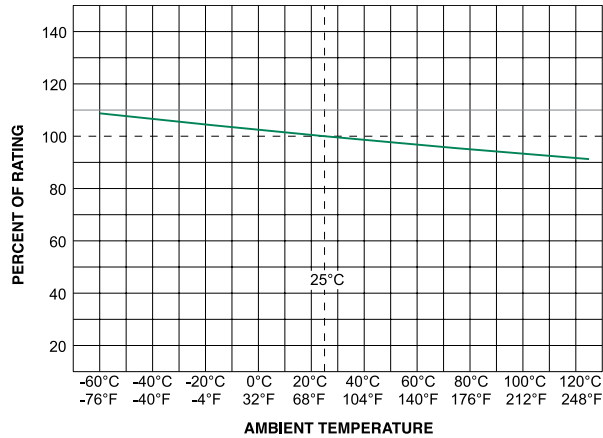


Resources



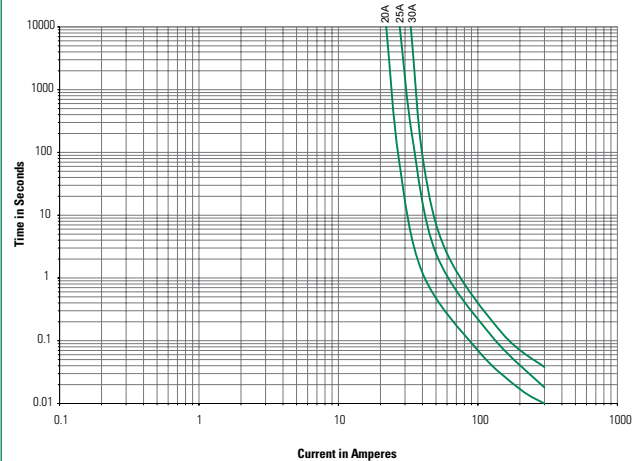
Samples

### Temperature Re-rating Curve

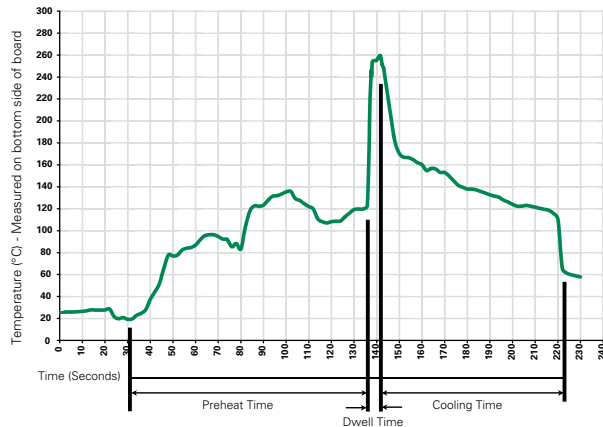


Note:  
Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

### Average Time Current Curves



### Soldering Parameters - Wave Soldering



### Recommended Process Parameters:

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

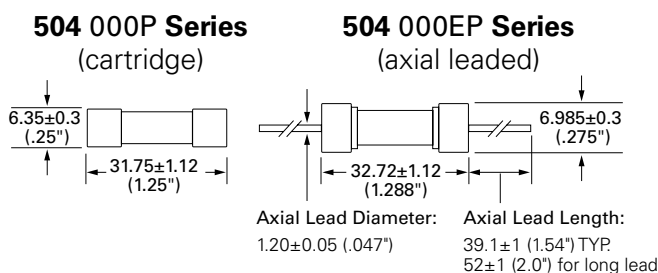
### Product Characteristics

<b>Materials</b>	Body : Ceramic Cap : Nickel-plated brass Leads : Tin-plated Copper
<b>Terminal Strength</b>	MIL-STD-202, Method 211, Test Condition A
<b>Solderability</b>	MIL-STD-202 Method 208
<b>Product Marking</b>	Cap1 : Brand logo, current and voltage ratings Cap2 : Series and agency approval marks

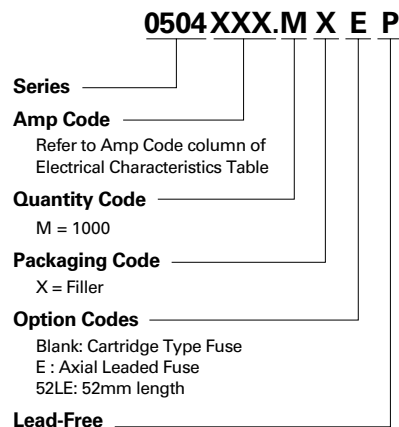
<b>Operating Temperature:</b>	-60°C to 125°C.
<b>Thermal Shock:</b>	MIL-STD-202, Method 107, Test Condition B
<b>Vibration</b>	MIL-STD-202, Method 201
<b>Humidity</b>	MIL-STD-202, Method 103, Test Condition A: High relative humidity (95%) and elevated temp (40°C) for 240 hours
<b>Salt Spray</b>	MIL-STD-202, Method 101, Test Condition B

### Dimensions

Measurements displayed in millimeters (inches)



### Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Reel Size
<b>504 Series</b>				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXE	N/A
Bulk	N/A	1000	MX52LE	N/A

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