

507 Series Lead-Free 3AB Fuse



Agency Approvals			
Agency Agency File Number		Ampere Range	
c FN [°] us	E10480	1A~8A	
(€	N/A	1A~8A	

Additional Information

Datasheet



Electrical Characteristic Specifications by Item



Samples

Description

A 650VDC rated ceramic fuse in a compact 6.3 x 32mm package, which is well suited for circuit protection in high energy applications.

Features

- Rated voltage @ 650VDC
- RoHS compliant and Lead-free

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• Available in cartridge and axial lead version

Applications

- High Voltage DC power application
- Inverter
- DC-DC Converter
- High voltage Power Supplies

Electrical Characteristics for Series

% of Ampere Rating	Ampere Rating	OpeningTime
100%	14 04	4 Hours, Minimum
200%	IA~8A	120 Seconds, Maximum

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Amp Code	Ampere Rating (A)	Max. Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² sec)	Agency Approvals	
						c 🔁 us	CE
001.	1		150A@650VDC	0.37	0.6	х	х
1.25	1.25			0.23	1.5	х	х
01.6	1.6	650VDC 150A@650VI		0.165	2.9	х	х
002.	2			0.115	2.3	х	х
02.5	2.5			0.083	4.1	х	х
3.15	3.15			0.056	9.3	х	х
004.	4			0.055	8	х	х
005.	5			0.042	12.5	х	x
06.3	6.3			0.0285	29	х	x
008.	8			0.0207	53	х	х

Axial Lead & Cartridge Fuses 3AB > 507 Series Fuse



Temperature Re-rating Curve



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



Soldering Parameters - Wave Soldering

Average Time Current Curves



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 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.**



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Product Characteristics

Materials	Body : Ceramic 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	Cap1 : Brand logo, current and voltage ratings Cap2 : Series and agency approval marks		

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

Part Numbering System





Packaging

Dimensions

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