Cartridge and Axial Lead Fuses

3AB > Fast-Acting > 505 Series





505 Series, Lead-free 3AB, Fast-Acting Fuse





Agency Approvals

Agency	Agency File Number	Ampere Range
c FU *us	Recognised File: E10480	10A - 30A
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Description

A 500VAC/VDC rated ceramic fuse with remarkable interrupting rating in a compact 6.3 x 32mm package, which is well suited for circuit protection in high energy applications.

Features

- In accordance with underwriter's Laboratories Standard UL 248-14
- Available in cartridge and axial lead form and with various lead forming dimensions.
- RoHS compliant and Lead-free
- Superior Interrupting rating of 20,000 Amperes
- Compact form factor of 6.3 x 32mm

Applications

 Uninterruptible Power Supplies (UPS) • 3 Phase Power Supplies

Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time
150%		30 minutes, Maximum
200%	10 - 30	30 minutes, Maximum
300%		10 sec., Maximum

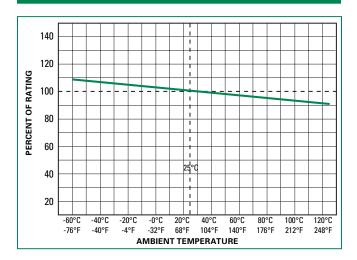
Electrical Characteristics

Amp Code	Amp Rating (A)	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²T (A²Sec.)	Nominal Voltage Drop at Rated Current	Nominal Power Dissapation at Rated Current (W)	Agency Approvals	
		, ,		(211112)		(mV)		c FL us	Œ
010.	10	450	20kA@450VAC	0.0167	91	N/A	N/A	X	X
012.	12	450		0.0117	192	N/A	N/A	Χ	X
016.	16	500	50kA@500VAC 20kA@500VDC	0.0087	51	N/A	N/A	X	X
020.	20	500	30kA@500VAC 20kA@500VDC	0.0063	101	N/A	N/A	X	X
025.	25	500		0.0051	145	N/A	N/A	X	X
030.	30	500		0.0044	203	N/A	N/A	X	X

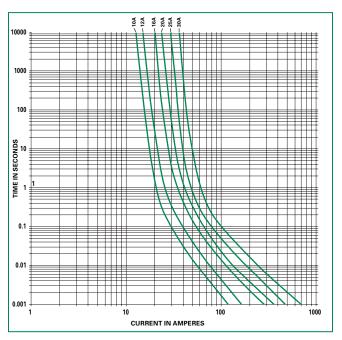
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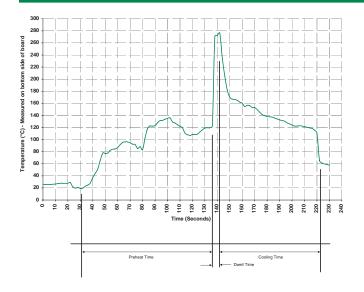
Temperature Rerating Curve



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:	280° 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.

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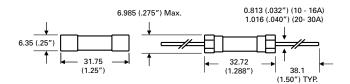
Product Characteristics

Material	Body: Ceramic Cap: Nickel-plated brass Leads: Tin-plated Copper		
Terminal Strength	MIL-STD-202G, Method 211A, Test Condition A		
Solderability	Reference IEC 60127 Second Edition 2003-01 Annex A		
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)		

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

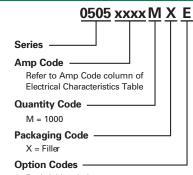
Dimensions

505 000P Series 505 000EP Series



All Dimensions in mm

Part Numbering System



E : Axial Leaded P : Lead-Free Others : special options.

Please call
Littelfuse for detail.

505 Series

Packaging

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