

### 618 Series, 5x20 mm, Time-Lag Fuse



#### Description

5x20mm Time-Lag glass body cartridge fuse designed to IEC specification.

#### Features

- Designed to International (IEC) Standards for use globally
- Meets the IEC 60127-2, Sheet 3 specification for Time-Lag fuses
- Available in cartridge and axial lead form
- RoHS compliant and lead-free

#### Applications

Used as supplementary protection in appliance or utilization equipment to provide individual protection for components or internal circuits.

#### Agency Approvals

Agency	Agency File Number	Ampere Range
	2005010207170553	0.125A-6.3A
	E10480	0.125A-10A
	29862	0.125A-10A
	40013496	0.125A – 10A
	N/A	0.125A-10A

\* Approval for Cartridge versions only

#### Additional Information



**Datasheet**



**Resources**



**Samples**

#### Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time
150%	0.125A-6.3A	60 minutes, Minimum
	8A-10A	30 minutes, Minimum
210%	0.125A-6.3A	120 sec., Maximum
	8A-10A	120 sec., Maximum
275%	0.125A-6.3A	600 ms., Min.; 10 sec. Max.
	8A-10A	600 ms., Min.; 10 sec. Max.
400%	0.125A-6.3A	150 ms., Min.; 3 sec. Max.
	8A-10A	150 ms., Min.; 3 sec. Max.
1000%	0.125A-6.3A	20 ms., Min.; 300 ms. Max.
	8A-10A	20 ms., Min.; 300 ms. Max.

# Axial Lead & Cartridge Fuses

5x20 mm > Time-Lag > 618 Series

## Electrical Characteristics

Amp Code	Amp Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I <sup>2</sup> t (A <sup>2</sup> sec)	Maximum Voltage Drop at Rated Current (mV)	Maximum Power Dissipation At 1.5In(W)	Agency Approvals					
								CCC	RU	SF	CE	DE	
.125	0.125	250	35 A @ 250 VAC	4.2000	0.1465	1900	1.6	x	x	x	x	x	
.160	0.16	250		3.7000	0.14400	1500	1.6	x	x	x	x	x	
.200	0.2	250		1.6000	0.3410	1300	1.6	x	x	x	x	x	
.250	0.25	250		1.0495	0.5405	1100	1.6	x	x	x	x	x	
.315	0.315	250		0.8475	1.1100	1000	1.6	x	x	x	x	x	
.400	0.4	250		0.5350	1.3250	900	1.6	x	x	x	x	x	
.500	0.5	250		0.3700	2.8250	300	1.6	x	x	x	x	x	
.630	0.63	250		0.2750	4.6750	250	1.6	x	x	x	x	x	
.800	0.8	250		0.0813	3.370	150	1.6	x	x	x	x	x	
001.	1	250		0.0613	6.730	150	1.6	x	x	x	x	x	
1.25	1.25	250		0.0446	12.650	150	1.6	x	x	x	x	x	
01.6	1.6	250		0.0336	23.350	150	1.6	x	x	x	x	x	
002.	2	250		0.0293	14.450	150	1.6	x	x	x	x	x	
02.5	2.5	250		0.0219	23.250	120	1.6	x	x	x	x	x	
3.15	3.15	250		0.0173	38.150	100	1.6	x	x	x	x	x	
004.	4	250		40 A @ 250 VAC	0.0129	69.10	100	1.6	x	x	x	x	x
005.	5	250		50 A @ 250 VAC	0.0104	111.00	100	1.6	x	x	x	x	x
06.3	6.3	250	63 A @ 250 VAC	0.0076	198.50	100	1.6	x	x	x	x	x	
008.	8	250	80 A @ 250 VAC	0.0059	341.50	100	4		x	x	x	x	
010.	10	250	100 A @ 250 VAC	0.0045	568.00	100	4		x	x	x	x	

## 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
<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>	260°C Maximum
<b>Solder Dwell Time:</b>	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.**

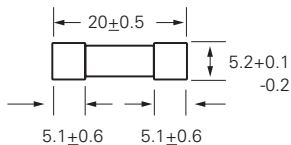
## Product Characteristics

<b>Material</b>	<b>Body:</b> Glass <b>Cap:</b> Nickel-plated Brass <b>Leads:</b> 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>	<b>Cap1:</b> Brand logo, current and voltage ratings <b>Cap2:</b> Agency approval marks
<b>Packaging</b>	Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel)

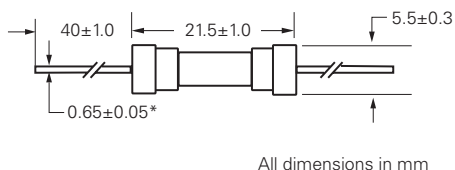
<b>Operating Temperature</b>	-55°C to +125°C
<b>Thermal Shock</b>	MIL-STD-202, Method 107, Test Condition B (5 cycles, -65°C to +125°C)
<b>Vibration</b>	MIL-STD-202, Method 201
<b>Humidity</b>	MIL-STD-202, Method 103, Test Condition A (High RH (95%) and elevated temperature (40°C) for 240 hours)
<b>Salt Spray</b>	MIL-STD-202, Method 101, Test Condition B

### Dimensions

0618 000P



0618.125 XEP  
to  
0618010. XEP

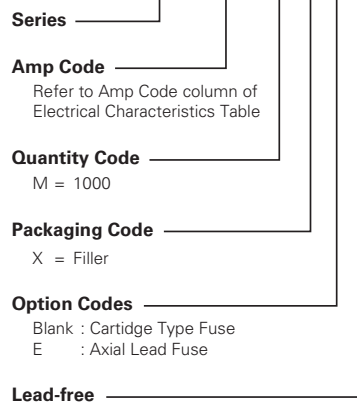


Notes:

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

### Part Numbering System

**0618 xxxx M X E P**



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
<b>618 Series</b>				
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	MXG	N/A
Bulk	N/A	1000	MXB	N/A
Bulk	N/A	100	HX	N/A