

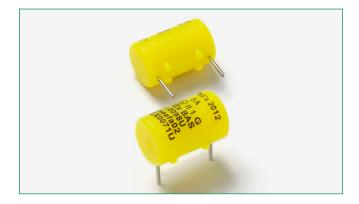
# PICO® 259 Series Safe-T-Plus Fuse











# **Description**

The Safe-T-Plus 259 Series offers a range of encapsulated fuses designed to enable greater safety for operating electronic equipment within potentially explosive environments. Originally designed to serve the needs of gas plants, petrochemical and processing industries, these fuses are certitifed for use within intrinsically safe apparatus with ATEX and IECEx certifications.

The fuse design and its encapsulant are suitable for use in intrinsically safe appartatus and associated apparatus for voltage not exceeding 125V rms (190V peak).

# **Agency Approvals**

Agency	Agency File Number	Ampere Range	
⟨£x⟩	Baseefa02ATEX0071U	0.062A - 5A	
IEC TECEX	IECEx BAS 10.0098U	0.062A - 5A	
<b>71</b>	E10480 E358130	0.062A - 5A	

#### **Electrical Characteristics for Series**

% of Ampere Rating	Opening Time	
100%	4 Hours, Minimum	
200%	5 Seconds, Maximum	

# **Reference Standards**

Agency	Standards	
ATEX	EN 60079-0, EN 60079-11	
IECEx	IEC 60079-0, IEC 60079-11	
UL	UL 913, UL 60079-0, UL 60079-11	

### **Features**

- Encapsulated and sealed (1mm minimum)
- 0.062A 5A range options
- Designed to operate within environments where there is danger of gas explosion from faulty circuits
- ATEX and IECEx certified components
- RoHS compliant
- Suitable for use in Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III and Class I, Zone O, AEx ia IIC Hazardous Locations.
- · Suitable for use in Gas. Zone 0 Hazardous Locations per IEC and EN 60079 Series

# **Applications**

· Testing, measuring or processing electronic and electrical equipment

### **Additional Information**







Resources



Samples



#### **Electrical Specifications by Items Agency Approvals** Ampere **Minimum Cold Minimum Cold Nominal Cold Nominal Melting Amp Interrupting Rating** Rating Resistance at Resistance at Resistance at 25°C Code I2t (A2 Sec.) IEC TECEX (A) -20°C (Ohms) -40°C (Ohms) (Ohms) $\langle E_{\rm X} \rangle$ 0.062 .062 0.00011 4.89 4.39 7.00 Х 0.125 .125 0.0012 1.35 1.26 1.70 Χ Χ Χ 0.250 .250 0.0095 0.51 0.48 0.665 50A @ 125 VAC 0.375 .375 0.025 0.32 0.29 0.395 Х Χ 0.500 .500 0.0598 0.24 0.22 0.302 Χ Χ 300A @ 125 VDC Χ 0.750 .750 0.153 0.14 0.12 0.175 X X Χ 1.00 001. 0.256 0.10 0.07 0.128 Χ Χ Χ 3.00 003. 1.27 0.03 0.01 0.03 Χ Χ 50A @ 125 VAC 5.00 005. 4.14 0.01 0.005 0.0158 Χ Χ Χ 300A @ 63 VDC

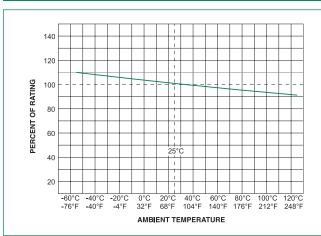
#### Schedule of limitations:

- 1. The fuse must be so mounted that creepage and clearance distances aren't impaired in any way.
- 2. The fuse is suitable for use in intrinsically safe equipment for voltages not exceeding 190V peak
- 3. Maximum surface temperature rise at 170% rated current: ≤750mA=40°C, 1A=55°C, 3A=118°C and 5A=135°C.

### **Product Characteristics**

Materials	Body : Polyamide Terminals - Tin Plated Copper Alloy Max. operating temperature of materials 130°C	
Operating Temperature	Operating temperature depends on fuse rating and max. allowed fuse surface temperature. (Consider re-rating)  Withstands 5 cycles of – 55°C to 125°C	
Thermal Shock		
Vibration	Per MIL-STD-202, Method 201	
Insulation Resistance (After Opening)	Greater than 10,000 ohms	

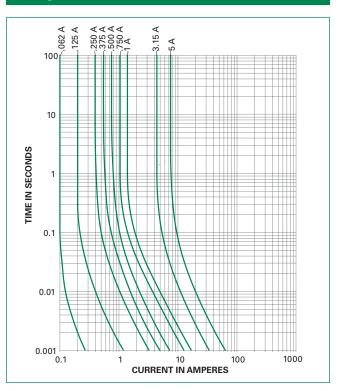
### **Temperature Re-rating Curve**



#### Note:

1. Re-rating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

### **Average Time Current Curves**





# PICO® 259 Series Safe-T-Plus Fuse for Hazardous Locations

# **Soldering Parameters**

### **Recommended Process Parameters:**

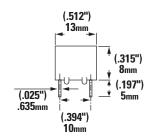
Wave Parameter	Lead-Free Recommendation
Preheat:	
(Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260°C Maximum
Solder Dwell Time:	2-5 seconds

#### **Recommended Hand Soldering Parameters:**

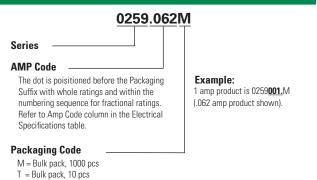
Solder Iron Temperature: 350°C +/- 5°C Heating Time: 5 seconds max.

Note: These devices are not recommended for IR or Convection Reflow process

#### **Dimensions**



# **Part Numbering System**



### **Packaging**

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
Bulk	N/A	1000	M = Bulk 1000 pieces, T = Bulk 10 pieces
Bulk	N/A	10	Please refer to available quantities above in "Part Numbering System"

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at: <a href="www.littelfuse.com/disclaimer-electronics">www.littelfuse.com/disclaimer-electronics</a>

# 单击下面可查看定价,库存,交付和生命周期等信息

# >>Littelfuse(美国力特)