

RoHS CALL (Ex) IEC IECEX

PICO[®] 259 Series Safe-T-Plus Fuse



Agency Approvals

Agency	Agency File Number	Ampere Range
(Ex)	Baseefa02ATEX0071U	0.062A - 5A
	IECEx BAS 10.0098U	0.062A - 5A
91	E10480	0.062A - 5A

Electrical Characteristics for Series

% of Ampere Rating	OpeningTime
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	

Electrical Specifications by Items

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).

Features

- Encapsulated and sealed (1mm minimum)
- ATEX and IECEx certified components
- 0.062A 5A range options RoHS compliant
- Designed to operate within environments where there is danger of gas explosion from faulty circuits

Applications

• Testing, measuring or processing electronic and electrical equipment

Additional Information



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

1) The fuse must be so mounted that creepage and clearance distances aren't impaired in any way.

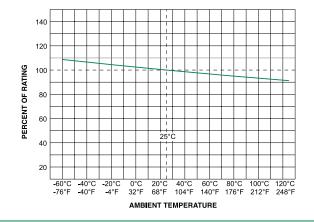
2) The fuse is suitable for use in intrinsically safe equipment for voltages not exceeding 190V peak.
3) Maximum surface temperature rise at 170% rated current: ≤750mA=40°C, 1A=55°C, 3A=118°C and 5A=135°C.

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Specifications are subject to change without notice. Application testing is strongly recommended. Revised: 01/04/16

Product Characteristics		
	Body : Polyamide	
Materials	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)	
Thermal Shock	Withstands 5 cycles of – 55°C to 125°C	
Vibration	Per MIL-STD-202, Method 201	
Insulation Resistance (After Opening)	Greater than 10,000 ohms	

Temperature Re-rating Curve



Note:

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

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 PotTemperature:	260°C Maximum
Solder Dwell Time:	2-5 seconds

Recommended Hand Soldering Parameters:

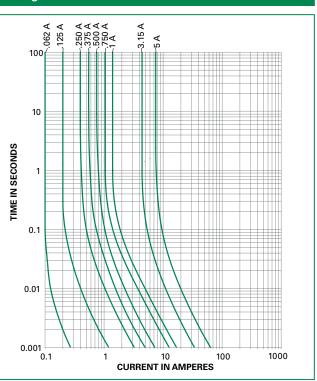
Solder Iron Temperature: 350°C +/- 5°C Heating Time: 5 seconds max.

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

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"

Average Time Current Curves



Part Numbering System

0259.062M

(.512") 13mm

(.394" 10mm

(.025") .635mm (.315") 8mm

÷(.197")

5mm

AMP Code -

Dimensions

PACKAGING Code M = Bulk pack, 1000 pcs T = Bulk pack, 10 pcs

SERIES

The dot is poisitioned before the Packaging Suffix with whole ratings and within the numbering sequence for fractional ratings. Refer to Amp Code column in the Electrical Specifications table.

1 amp product is 0259**001.**M

Example:

(.062 amp product shown).

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