

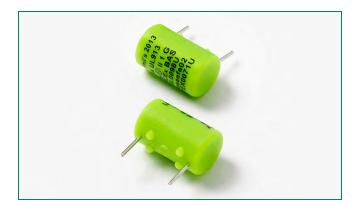
PICO® 259-UL913 Series Intrinsically Safe Fuse











Agency Approvals

Agency	Agency File Number	Ampere Range
€ x >	Baseefa02ATEX0071U	0.62A - 5A
71	E10480 E358130	0.62A - 5A
IEC IECEX	IECEx BAS 10.0098U	0.62A - 5A

Electrical Characteristics for Series

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

Description

The 259-UL913 Series offers a range of encapsulated fuses certified under the UL 913, the standard for intrinsically safe electrical equipment, to operate in hazardous locations. Ideal for use in the oil, gas, mine, chemical process, and pharmaceutical industries, the 259-UL913 fuse was designed to limit the energy and temperature generated during its operation. In addition to UL913, these fuses meet ATEX and IECEx requirements. 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)
- 0.62A 5A range options
- Designed to operate within hazardous environments
- Global hazardous location certifications

Applications

• Testing, measuring or processing electronic and electrical equipment

Reference Standards

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

Electrical Specifications by Items

Ampere	Ampere Amp Interrupting		Nominal	Minimum Cold Resistance at	Minimum Cold	Nominal Cold Resistance at	Agency Approvals		
(A)	Code	Rating	Melting I²t (A² Sec.)	-20°C (Ohms)	Resistance at -40°C (Ohms)	25°C (Ohms)	⟨Ex⟩	IEC TECEX	AI.
0.062	.062		0.00011	4.89	4.39	7.00	X	X	Х
0.125	.125		0.0012	1.35	1.26	1.70	×	Х	Х
0.250	.250		0.0095	0.51	0.48	0.67	X	X	Х
0.375	.375	50A @ 125 VAC	0.025	0.32	0.29	0.395	Х	X	Х
0.500	.500	300A @ 125 VDC	0.0598	0.24	0.22	0.302	X	X	Х
0.750	.750		0.153	0.14	0.12	0.175	Х	X	Х
1.00	001.		0.256	0.10	0.07	0.128	X	X	Х
3.00	003.		1.27	0.03	0.01	0.03	Х	X	Х
5.00	005.	50A @ 125 VAC 300A @ 63 VDC	4.14	0.01	0.005	0.0158	х	×	х

Schedule of limitations:

- 1) The fuse must be mounted in such a way 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.

Additional Information







Special Application Fuses

PICO® 259-UL913 Series Intrinsically Safe Fuse for Hazardous Locations

Product Characteristics

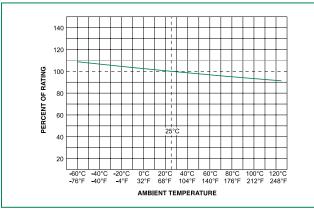
Operating Temperature			
Current Rating	Ambient Temperature		
≤ 0.750 A	- 40°C to +81°C		
1 A	- 40°C to +73°C		
3 A	- 40°C to +74°C		
5 A	- 40°C to +45°C		

Notes

- 1. Any use of the 259-UL913 Series fuse outside of the ambient temperature ranges specified in the table is subject to additional investigation.
- 2. Specified ambient temperature range is for intrinsic safety certification.

Materials	Body : Polyamide Terminals -Tin Plated Copper Alloy Maximum operating temperature of Materials is 130°C	
Operating Temperature	For operating temperature see table above (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 (at 250V DC)	

Temperature Re-rating Curve



Note:

Soldering Parameters

Recommended Process Parameters:

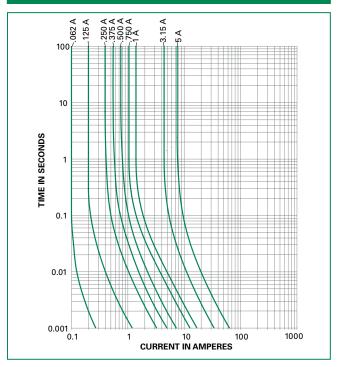
Wave Parameter	Lead-Free Recommendation	
Preheat:		
(Depends on Flux Activation Temperature)	(Typical Industry Recommendation)	
Temperature Minimum:	100°C	
Temperature Maximum:	150°C	
Preheat Time:	60-180 seconds	
Solder Pot Temperature:	260°C Maximum	
Solder DwellTime:	2-5 seconds	

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

Average Time Current Curves



Part Numbering System

0259.062M X913

SERIES

AMP Code -

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.

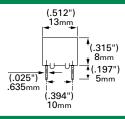
PACKAGING Code

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

Example:

1 amp product is 0259**001.**MX913 (.062 amp product shown).

Dimensions



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"

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

 0259003.TX913
 0259001.MX913
 0259.500MX913
 0259.750TX913
 0259.125MX913
 0259.250TX913

 0259.250MX913
 0259.375TX913
 0259.062MX913
 0259.062TX913
 0259.125TX913
 0259005.TX913

 0259005.MX913
 0259003.MX913
 0259.750MX913
 0259001.TX913
 0259.375MX913
 0259.500TX913