# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

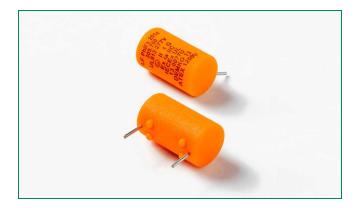
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### PICO® 305 Series - 277V UL913 Intrinsically Safe Fuse

ROHS CAL UL913



Agency Approvals		
Agency	Agency File Number	
ATEX	DEMKO 13 ATEX 1200U	
c 🗫 us	E358130	
IECEx	IECEx UL 13.0077U	

#### **Reference Standards**

Agency	Standards
ATEX	EN 60079-0, EN 60079-11, EN 60079-26
IECEx	IEC 60079-0, IEC 60079-11, IEC 60079-26
UL	UL 913, UL 60079-0, UL 60079-11
cUL	CAN/CSA C22.2 No. 157, CAN/CSA C22.2 No. 60079-0, CAN/CSA C22.2 No. 60079-11

#### Description

The PICO 305-Series fuse offer a range of encapsulated fuses approved under UL 913 standard for Intrinsically Safe Electrical Equipment to operate in hazardous locations. Ideal for use in oil, gas, mine, chemical, and pharmaceutical industries, the PICO 305-Series fuse was designed to limit the energy and temperature generated during its operation. The fuse design and its encapsulant are suitable for use in an intrinsically safe apparatus and associated apparatus for voltage not exceeding 277V.

#### **Features**

- High Interrupting Rating of Designed for operation 1500A
- in a range of hazardous environments

Process control and

automations

Sensors

Sealed

- Well suited for 277V application
- Current rating options from 0.050 to 0.750A

#### Applications

- Testing, measuring or processing electronic and electrical equipment
- Motor controllers
- Lighting • Communication handsets • Flowmeters

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

% of Ampere Rating	OpeningTime
110%	4 Hours, Minimum
300%	10 Seconds, Maximum
1000%	0.002 Seconds, Maximum

#### **Electrical Specifications by Items**

Ampere Rating (A)	Interrupting Rating	Amp Code	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² Sec.)	Agency Approvals		
					ATEX	c 🔨 us	IECEx
0.050	- - 1500A @ 277VAC/DC	.050	11.34	0.00019	х	х	Х
0.080		.080	8.19	0.00035	х	х	х
0.100		.100	3.60	0.00138	х	х	х
0.160		.160	3.00	0.00202	х	х	х
0.200		.200	2.68	0.00288	х	х	х
0.250		.250	1.6	0.00662	х	х	х
0.500		.500	0.46	0.04462	х	х	Х
0.750		.750	0.27	0.13448	х	х	х

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

2) The fuse is suitable for use in intrinsically safe equipment and associated apparatus for voltage not exceeding 375V peak.

3) Maximum surface temperature rise at 170% rated current 200mA=80°C, 250mA = 84°C, 500mA = 56°C, and 750mA = 84°C.

#### **Product Characteristics**

OperatingTemperature			
Current Rating	AmbientTemperature		
≤ 0.200 A	- 40 °C to +50 °C		
0.250 A	- 40 °C to +46 °C		
0.500 A	- 40 °C to +74 °C		
0.750 A	- 40 °C to +46 °C		

#### Note:

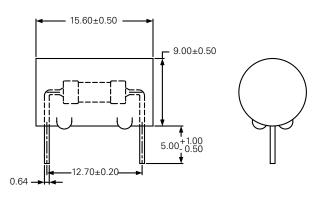
1) Any use of the 305 Series fuse outside of the ambient temperature ranges specified in the table is subject to additional investigation.

Thermal Shock	Withstands 5 cycles of –55°C to 125°C
Vibration	Per MIL-STD-202F
Insulation Resistance (After Opening)	Greater than 10,000 ohms (at twice rated DC voltage)

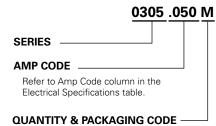
#### **Soldering Parameters**

260°C, 10 seconds max.

#### Dimensions



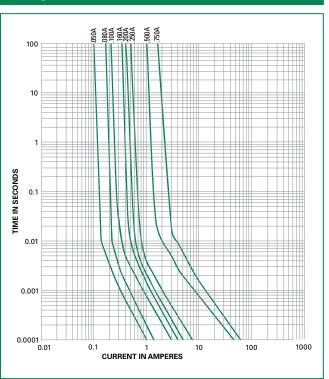
#### Part Numbering System



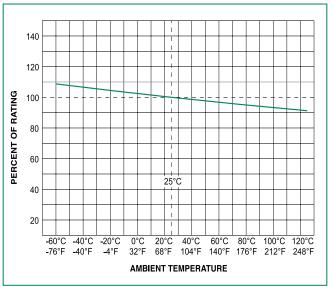
M = Bulk pack, 1000 pcs

V = Bulk pack, 5 pcs

#### **Average Time Current Curves**



#### Temperature Rerating Curve



Note:

1) Rerating depicted in this curve is in addition to the standard rerating of 25% for continuous operation.

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