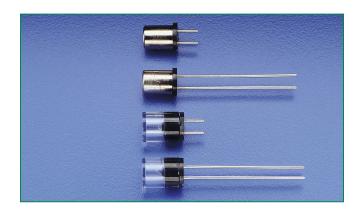
Axial Lead & Cartridge Fuses

MICROTM > Very Fast-Acting Fuse > 272/273/274/278/279 Series

272/273/274/278/279 Series, MICRO™ Very Fast-Acting Fuse





Description

Developed originally for the U.S. Space Program, MICRO™ fuse provides reliability in a compact design. The MICRO™ fuse is available in plug–in or radial lead styles and a complete range of ampere ratings from 0.002A to 5A to suit a wide variety of design needs.

Features

- Military grade available
- High breaking capacity
- Clear cover option to view fuse element status
- Available from very low ampere of 0.002A to 5A
- Plug-in with short or long leads option
- Recognized to UL/CSA/ NMX 248-1 and UL/CSA/ NMX 248-14

Agency Approvals

	Agency	Agency File Number	Ampere Range		
	M	E10480	0.002A - 5A		
_	(29862	0.002A - 5A		
	QPL	QPL-23419	0.002A - 5A		

Applications

 Printed circuit boards and similar equipment • Electronic components

Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time	
100%	0.002 – 5	4 Hours, Min.	
200%	0.002 - 0.3	5 Seconds, Max.	
20070	0.4 - 5	2 Seconds, Max.	

Electrical Characteristics

Ampere	Amp Code	Max		Nominal Cold	Agency Approva			als
Rating (A)	(for all above series)	Voltage Rating (V)	Interrupting Rating	Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	<i>71</i> 2	∰ .	QPL
0.002	0.002	125		2200	0.00000000845	Х	X	X
0.005	0.005	125		280	0.0000000766	X	X	X
0.010	0.010	125		80.0	0.000000462	X	X	X
0.015	0.015	125		44.0	0.00000123	X	X	X
0.031	0.031	125		16.0	0.00000810	X	X	X
0.050	0.050	125		3.52	0.0000666	X	X	X
0.062	0.062	125		2.55	0.000115	X	X	X
0.100	0.100	125	40.000A@40F\\ACA\DC	1.38	0.000385	X	X	X
0.125	0.125	125		1.0	0.000691	X	X	X
0.200	0.200	125		2.30	0.00409	X	X	X
0.250	0.250	125		1.75	0.00640	X	X	X
0.300	0.300	125		1.25	0.00945	X	X	X
0.400	0.400	125	10,000A@125VAC/VDC	0.227	0.0251	X	X	X
0.500	0.500	125		0.167	0.0716	X	X	X
0.600	0.600	125		0.430	0.0411	X	X	X
0.700	0.700	125		0.324	0.0710	X	X	X
0.750	0.750	125		0.293	0.0563	X	X	X
0.800	0.800	125		0.271	0.113	X	X	X
1.00	001.0	125		0.0880	0.0648	X	X	X
01.5	01.5	125		0.0578	0.160	X	X	X
2.00	002.0	125		0.0425	0.300	X	X	X
3.00	003.0	125		0.0275	0.759	X	X	X
*4.00	004.0	125		0.0202	1.38	X	X	X
*5.00	005.0	125		0.0156	2.21	X	X	X

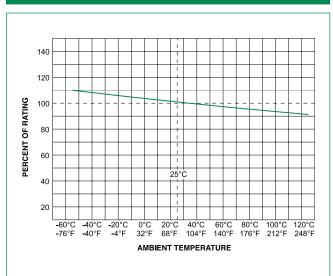
^{*} The fuses of 4A and 5A for 272 and 278 Series are obsolete.

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Axial Lead & Cartridge Fuses

MICRO™ > Very Fast-Acting Fuse > 272/273/274/278/279 Series

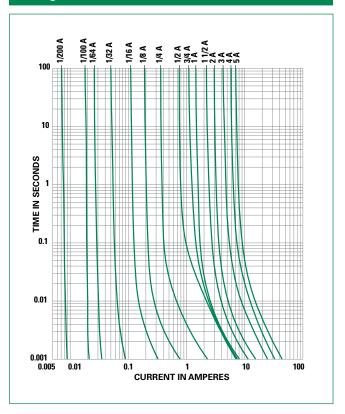
Temperature Re-rating Curve



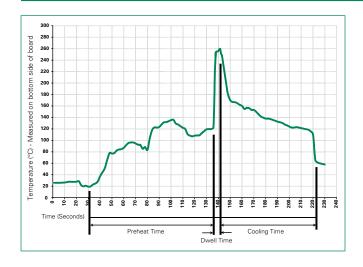
Note:

1. 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		
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 DwellTime:	2-5 seconds		

Recommended Hand-Solder Parameters:

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

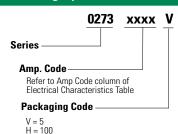
Note: These devices are not recommended for IR or Convection Reflow process.

Axial Lead & Cartridge Fuses

Product Characteristics

Operating Temperature:	273 and 279: -55°C to +85°C; 272 and 278: -55°C to +125°C	
Fuses to MIL SPEC	Military QPL type (FM02). To order, change 273 to 274.	
Materials	272 and 278 series cap: Nickel Plated Brass 273, 274 and 279 series cap: Mirror polished Polycarbonate Base: R-4 Ryton Pins: Tin Plated Copper	
Product Marking	Current and voltage ratings stamped on cap	

Part Numbering System



Additional Information



Datasheet 272 Series



Datasheet 273 Series



Datasheet 274 Series



Datasheet 278 Series



Datasheet 279 Series



Resources 272 Series



Resources 273 Series



Resources 274 Series



Resources 278 Series



Resources 279 Series



Samples 272 Series



Samples 273 Series



Samples 274 Series



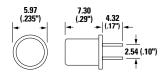
Samples 278 Series



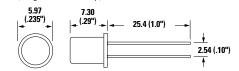
Samples 279 Series

Dimensions

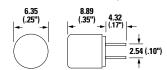
272 000 Series (Short Lead, Metal Cap)



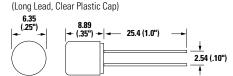
278 000 Series (Long Lead, Metal Cap)



273 000 and 274 000 Series (Short Lead, Clear Plastic Cap)



279 000 Series



NOTE: Amperage and voltage rating stamped on cap. Leads are tin plated copper; .025" diameter.

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
Bulk	N/A	5	V
Bulk	N/A	100	Н

^{*}Only V-pack version for low current rating from 0.002 - 0.062 (A) and for 274, 278, 279 Series