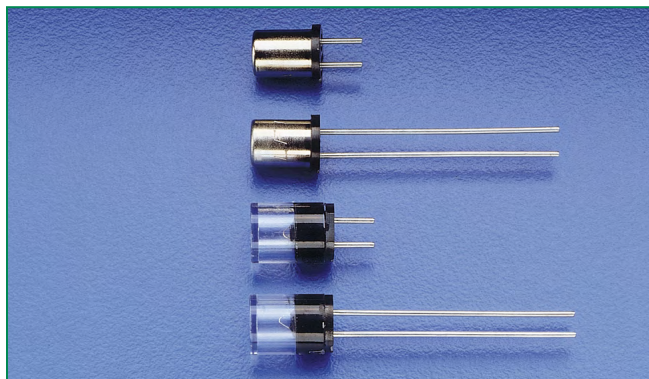


272/273/274/278/279 Series, MICRO™ Very Fast-Acting Fuse



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

Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	0.002A - 5A
	29862	0.002A - 5A
	FM02	0.002A - 5A

Applications

- Printed circuit boards and similar equipment
- Electronic components

Electrical Characteristics

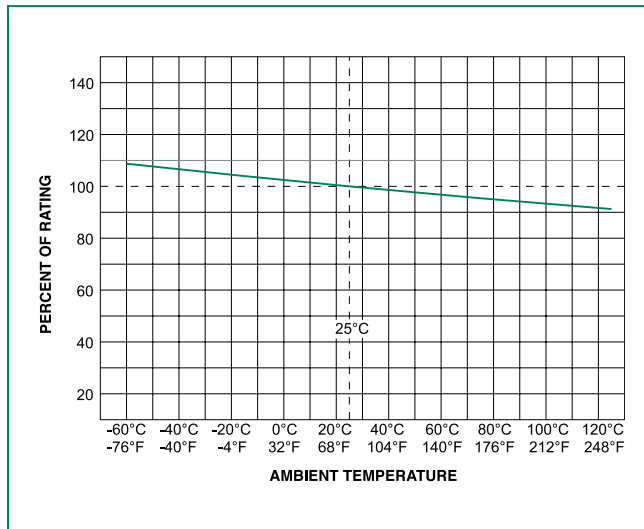
% of Ampere Rating	Ampere Rating	Opening Time
100%	0.002 – 5	4 Hours, Min.
200%	0.002 – 0.3	5 Seconds, Max.
	0.4 - 5	2 Seconds, Max.

Electrical Characteristics

Ampere Rating (A)	Amp Code (for all above series)	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Agency Approvals		
								
.002	.002	125	10,000A@125VAC/VDC	2200	0.00000000845	X	X	X
.005	.005	125		280	0.0000000766	X	X	X
.010	.010	125		80.0	0.000000462	X	X	X
.015	.015	125		44.0	0.00000123	X	X	X
.031	.031	125		16.0	0.00000810	X	X	X
.050	.050	125		3.52	0.0000666	X	X	X
.062	.062	125		2.55	0.000115	X	X	X
.100	.100	125		1.38	0.000385	X	X	X
.125	.125	125		1.0	0.000691	X	X	X
.200	.200	125		2.30	0.00409	X	X	X
.250	.250	125		1.75	0.00640	X	X	X
.300	.300	125		1.25	0.00945	X	X	X
.400	.400	125		0.227	0.0251	X	X	X
.500	.500	125		0.167	0.0716	X	X	X
.600	.600	125		0.430	0.0411	X	X	X
.700	.700	125		0.324	0.0710	X	X	X
.750	.750	125		0.293	0.0563	X	X	X
.800	.800	125		0.271	0.113	X	X	X
1.00	.001	125		0.0880	0.0648	X	X	X
01.5	01.5	125		0.0578	0.160	X	X	X
2.00	002.	125		0.0425	0.300	X	X	X
3.00	003.	125		0.0275	0.759	X	X	X
*4.00	004.	125		0.0202	1.38	X	X	X
*5.00	005.	125		0.0156	2.21	X	X	X

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

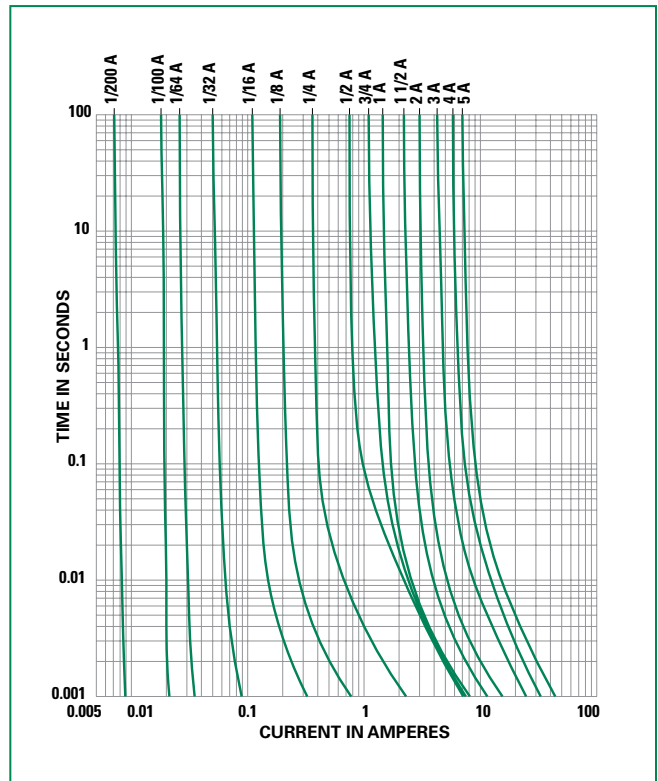
Temperature Re-rating Curve



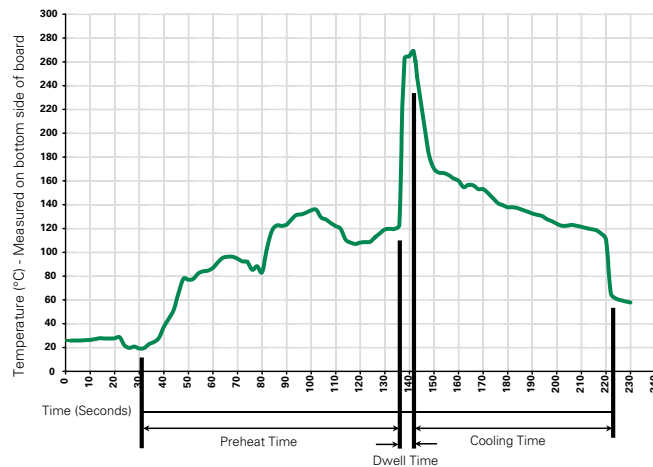
Note:

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

Recommended Hand-Solder Parameters:

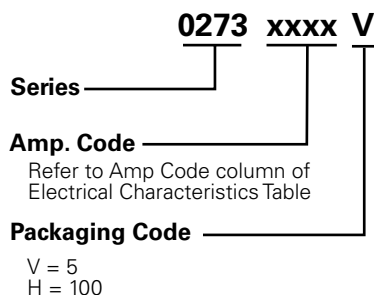
Solder Iron Temperature: 350° C +/- 5° C
Heating Time: 5 seconds max.

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

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



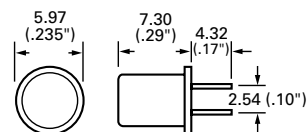
Additional Information



Dimensions

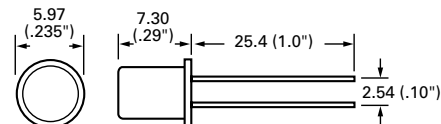
272 000 Series

(Short Lead, Metal Cap)



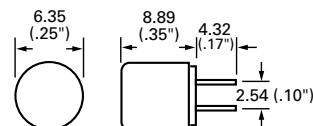
278 000 Series

(Long Lead, Metal Cap)



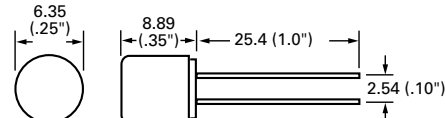
273 000 and 274 000 Series

(Short Lead, Clear Plastic Cap)



279 000 Series

(Long Lead, Clear Plastic Cap)



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	H

Mouser Electronics

Authorized Distributor

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

Littelfuse:

0272002.H	0272005.H	0279.750V	0274.300V	0272.010V	0273.002V	0279.250V	0273001.H	0273.250H
0279.050V	0274002.V	0279.005V	0274001.V	0272.125V	0273.010V	0278001.V	0274.200V	0274003.V
0278.700V	0272.700V	0273.300H	0278.750V	0273.700V	0279003.V	0274.002V	0279.300V	0274.750V
0274.125V	0279.062V	0273.050H	0278.200V	0279.400V	0273.031V	0274.250V	0279004.V	0278002.V
0272.015V	0278.500V	0278.005V	0274.010V	0273.100H	0279002.V	0272003.H	0273.200V	027801.5V
0274.015V	0272.250H	0272003.V	027401.5V	0278.300V	0272.400V	0272001.H	0279.010V	0279.031V
0279001.V	0272.200V	0279.500V	0273004.H	0279.600V	0278.125V	0272004.V	0278.250V	027901.5V
0278.100V	0272.600V	0278.002V	0278.050V	0274005.V	0273.005V	0273002.H	0272.100V	0273002.V
0273.100V	0273.125V	027301.5V	0273.250V	0272.250V	0272.500V	0272.750V	0272001.V	0272002.V
027201.5V	0273.300V	0273.400V	0273.750V	0273004.V	0273005.V	0272.031V	0272.050V	0279.200V
0278.010V	0274.400V	0279.015V	0279.100V	0273.600V	0274.100V	0278.400V	0279.125V	0273.800V
0274.600V								