

# Radial Lead Fuses

MICRO™ > Very Fast-Acting Fuse > 262/268/269 Series

## 262/268/269 Series, MICRO™ Very Fast-Acting Fuse (High-Reliability)



### Agency Approvals

Agency	Agency File Number	Ampere Range	Series
	E10480	0.002A - 5A	262 & 268
	29862	0.002A - 5A	262 & 268
	FM07A	0.002A - 5A	269

### Description

The 262/268/269 Series are high-reliability MICRO™ fuses, with a 125V rating, very fast-acting type with high breaking capacity. The 269 series is listed under the Department of Defense Quality Product List.

### Features

- Military grade available
- Available in plug-in and radial leaded
- Available from very low ampere of 0.002A to 5A

### Applications

Protection of electrical, electronic, and communication equipment having printed circuit boards (PCBs) usable in direct current (DC) and alternating current (AC) (up to 400 hertz (Hz)) circuits capable of withstanding and functioning in extreme conditions found in Spacecraft or Military applications as described in MIL-PRF-23419.

### Electrical Characteristics

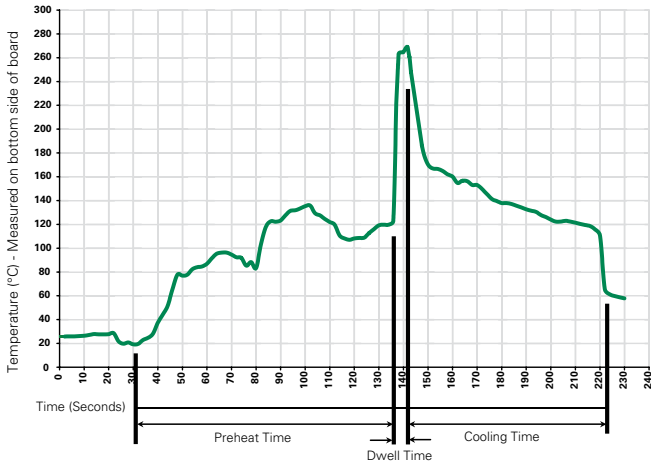
% of Ampere Rating	Ampere Rating	Opening Time
100%	0.002 – 15	4 Hours, <b>Min.</b>
200%	0.002 – 0.3	5 Seconds, <b>Max.</b>
	0.4 - 5	2 Seconds, <b>Max.</b>

### Electrical Characteristics

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Agency Approvals		
.002	.002	125	10,000A@125VAC/VDC	2000	X	X	X
.005	.005	125		280	X	X	X
.010	.010	125		94.0	X	X	X
.015	.015	125		44.0	X	X	X
.031	.031	125		16.45	X	X	X
.050	.050	125		3.20	X	X	X
.062	.062	125		2.25	X	X	X
.100	.100	125		1.17	X	X	X
.125	.125	125		1.0	X	X	X
.200	.200	125		2.30	X	X	X
.250	.250	125		1.75	X	X	X
.300	.300	125		1.25	X	X	X
.400	.400	125		0.227	X	X	X
.500	.500	125		0.167	X	X	X
.600	.600	125		0.140	X	X	X
.700	.700	125		0.114	X	X	X
.750	.750	125		0.104	X	X	X
.800	.800	125		0.094	X	X	X
1.00	.001	125		0.100	X	X	X
01.5	01.5	125		0.063	X	X	X
2.00	002.	125		0.046	X	X	X
3.00	003.	125		0.034	X	X	X
4.00	004.	125		0.019	X	X	X
5.00	005.	125		0.018	X	X	X

Please contact Littelfuse for Average Time Current Curve.

**Soldering Parameters - Wave Soldering**



**Recommended Process Parameters:**

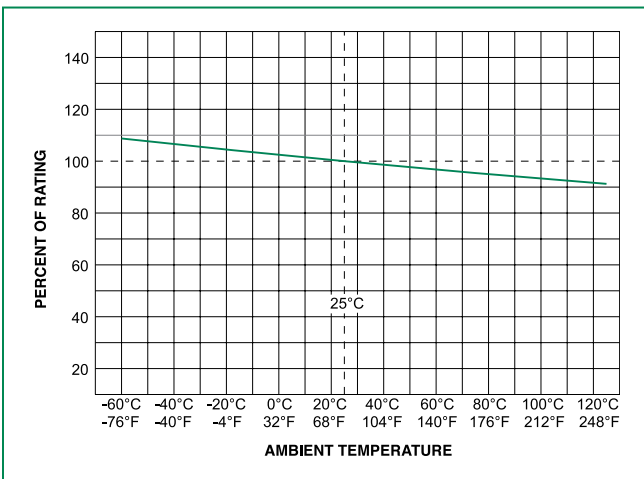
Wave Parameter	Lead-Free Recommendation
<b>Preheat:</b> (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
<b>Solder Pot Temperature:</b>	260° C Maximum
<b>Solder Dwell Time:</b>	2-5 seconds

**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.**

**Temperature Re-rating Curve**



**Notes:**

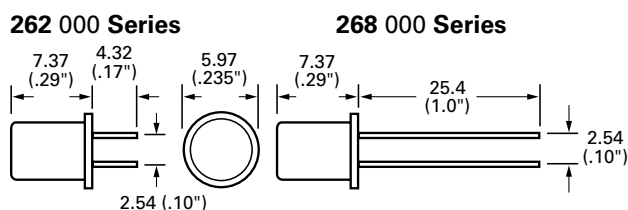
1. Re-rating depicted in this curve is in addition to the standard derating of 25% for continuous operation.
2. Please contact Littelfuse for average time current curve.

### Product Characteristics

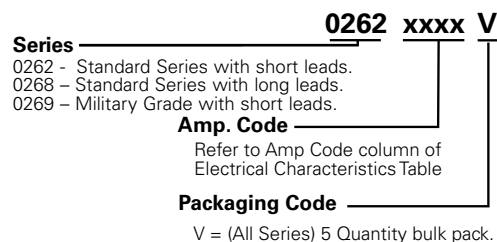
<b>Materials</b>	Gold-Plated Copper Leads, Type II (Fuse cap is also Gold-Plated)
<b>Weight</b>	262 and 269 Series .36 Grams; 268 Series .48 Grams
<b>Lead Pull Force</b>	MIL-STD-202, Method 211, Test Condition A (will withstand a 5 lb. axial pull test)
<b>AQL (Electrical Characteristics)</b>	Certified to 1% AQL
<b>Sampling</b>	Per MIL-STD-105, Inspection Level II
<b>Traceability and Identification Records</b>	Controlled by lot number and retained on file for a minimum of three years. Copies of Lot Certification Test data available when requested with order
<b>Options</b>	Special screening tests, burn-in, etc. can be supplied on special order to meet specific requirements
<b>Product Marking</b>	262 / 268 Series: Brand logo, current and voltage ratings 269 Series: Brand logo, current and voltage ratings and agency approval mark

<b>Operating Temperature</b>	-55°C to +125°C
<b>Shock</b>	(1/500): MIL-STD-202, Method 213, Test Condition A (50 G's peak for 11 milliseconds). (1/200-5): MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds)
<b>Vibration</b>	MIL-STD-202, Method 201 (10-55 Hz); MIL-STD-202, Method 204, Test Condition C (55-2000 Hz at 10 G's Peak)
<b>Salt Spray</b>	MIL-STD-202, Method 101, Test Condition B
<b>Seal Test</b>	MIL-STD-202, Method 112, Test Condition A
<b>Insulation Resistance (After Opening)</b>	MIL-STD-202, Method 302, Test Condition A (1/2 Megohm minimum)
<b>Thermal Shock</b>	MIL-STD-202, Method 107, Test Condition B (-65°C to 125°C)
<b>Moisture Resistance</b>	MIL-STD-202, Method 106
<b>Fuses to MIL SPEC</b>	262 Series is available as FM07A on QPL for MIL-PRF-23419/7. To order, change 262 to 269

### Dimensions



### Part Numbering System



### Packaging

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

### Additional Information



**Datasheet**  
262 Series



**Resources**  
262 Series



**Samples**  
262 Series



**Datasheet**  
268 Series



**Resources**  
268 Series



**Samples**  
268 Series



**Datasheet**  
269 Series



**Resources**  
269 Series



**Samples**  
269 Series

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