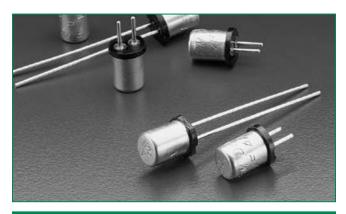


# 262/268/269 Series, MICRO™ Very Fast-Acting Fuse (High-Reliability)





#### **Agency Approvals**

Agency	Agency File Number	Ampere Range		
<b>71</b>	E10480	2mA - 5A		
<b>(</b>	LR 29862	2mA - 5A		
QPL	FM07A	2mA - 5A		

# Description

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

#### **Features**

- Military grade available
- Available from very low ampere of 2mA to 5A
- Available in plug-in and radial leaded

# **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	OpeningTime
100%	1/500–15	4 Hours, <b>Min.</b>
200%	1/500–3/10	5 Seconds, <b>Max.</b>
200%	4/10-5	2 Seconds, <b>Max.</b>

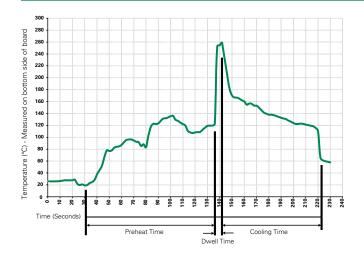
# **Electrical Characteristics**

Ampere	pere Max		Nominal Cold	Agency Approvals			
Rating (A)	Amp Code	Voltage Rating (V)	Interrupting Rating	Resistance (Ohms)	<b>71</b>	<b>(</b>	QPL
.002	.002	125		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	10,000 amperes at	1.25	X	X	X
.400	.400	125	125 VAC/VDC	0.227	Χ	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	Χ	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:**

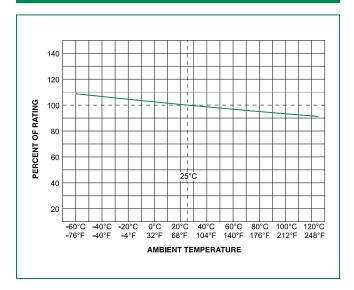
Wave Parameter	Lead-Free Recommendation		
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)		
Temperature Minimum:	100° C		
Temperature Maximum:	150° C		
Preheat Time:	60-180 seconds		
Solder Pot Temperature:	260° C Maximum		
Solder DwellTime:	2-5 seconds		

#### **Recommended Hand-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 Rerating Curve**



Please contact Littelfuse for average time current curve.



### **Product Characteristics**

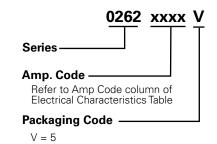
Materials	Gold-Plated Copper Leads, Type II (Fuse cap is also Gold-Plated)		
Weight	262 and 269 Series .36 Grams; 268 Series .48 Grams		
Lead Pull Force	MIL-STD-202, Method 211, Test Condition A (will withstand a 5 lb. axial pull test)		
AQL (Electrical Characteristics)	Certified to 1% AQL		
Sampling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

Operating Temperature	-55°C to +125°C		
Shock	(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)		
Vibration	MIL-STD-202, Method 201 (10–55 Hz); MIL-STD-202, Method 204, Test Condition C (55–2000 Hz at 10 G's Peak)		
Salt Spray	MIL-STD-202, Method 101, Test Condition B		
Seal Test	MIL-STD-202, Method 112, Test Condition A		
Insulation Resistance (After Opening)	MIL-STD-202, Method 302, Test Condition A (1/2 Megohm minimum)		
Thermal Shock	MIL-STD-202, Method 107, Test Condition B (-65°C to 125°C)		
Moisture Resistance	MIL-STD-202, Method 106		
Fuses to MIL SPEC	262 Series is available in FM07A on QPL for MIL-PRF-23419/7. To order, change 262 to 269		

# **Dimensions**

# 262 000 Series 268 000 Series 7.37 4.32 5.97 7.37 (.29") 25.4 (1.0") 2.54 (.10")

# Part Numbering System



# **Packaging**

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