

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



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 in plug-in and radial leaded
- Available from very low ampere of 2mA 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.

Agency Approvals

Agency	Agency File Number	Ampere Range
	E10480	2mA - 5A
	LR 29862	2mA - 5A
	FM07A	2mA - 5A

Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time
100%	1/500–15	4 Hours, Min.
200%	1/500–3/10	5 Seconds, Max.
	4/10-5	2 Seconds, Max.

Electrical Characteristics

Ampere Rating (A)	Amp Code	Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Agency Approvals		
.002	.002	125	10,000 amperes at 125 VAC/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
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.

Temperature Derating 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



Part Numbering System



Packaging

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