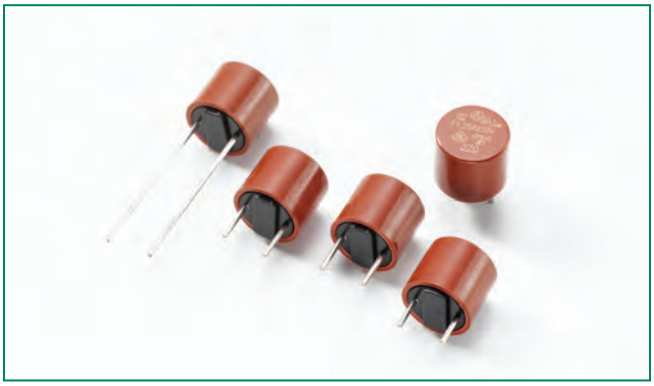
370 Series, TR5®, Fast-Acting Fuse



Agency Approvals

Agency	Agency File Number	Ampere Range
	License number: 5007679-1170-0001/82438	100mA - 5A
	License number: 5007679-1170-0001/97059 5007679-1170-0009/97069 5007679-1170-0002/82443	40mA 50mA - 80mA 6.3A
	Certificate number: 1012264	50mA - 6.3A
	File number: E67006	40mA - 6.3A
	JET0381-31007-2003	1A - 5A
	2007010207240347	50mA - 5A

Electrical Characteristics

% of Ampere Rating	Opening Time
150%	1 Hour, **Min.**
210%	30 Minutes, **Max.**
275%	10 ms, **Min.** ; 3 Sec., **Max.**
400%	3 ms, **Min.** ; 300 ms, **Max.**
1000%	20 ms, **Max.**

Description

The 370 Series are TR5®,sub-miniature,fast-acting type, 250V rated fuses, designed in accordance to IEC 60127-3.

Features

- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Halogen free
- Lead-free
- Available from 40mA to 6.3A

Applications

- Battery Chargers
- Consumer Electronics
- Power supplies
- Industrial Controllers

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Specifications are subject to change without notice.
Please refer to www.littelfuse.com/series/370.html for current information.

Revised: August 7, 2012

Electrical Characteristics

Amp Code	Rated Current	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I_N max. (mV)	Power Dissipation 1.5 x I_N max. (mW)	Melting Integral 10 x I_N max. (A^2s)	Agency Approvals				
							DVE		cULus	PSE JET	
0040	40mA	250V	35 A/ 250VAC[1] 50-60 Hz cos φ = 1.0	900	100	0.0002	G		X		
0050	50mA	250V		320	80	0.00035	X	X	X		X
0063	63mA	250V		350	100	0.0005	X	X	X		X
0080	80mA	250V		370	120	0.0014	X	X	X		X
0100	100mA	250V		600	130	0.0038	X	X	X		X
0125	125mA	250V		550	172	0.0066	X	X	X		X
0160	160mA	250V		500	165	0.014	X	X	X		X
0200	200mA	250V		465	190	0.03	X	X	X		X
0250	250mA	250V		400	250	0.051	X	X	X		X
0315	315mA	250V		380	250	0.1	X	X	X		X
0400	400mA	250V		120	135	0.025	X	X	X		X
0500	500mA	250V		120	155	0.042	X	X	X		X
0630	630mA	250V		115	200	0.076	X	X	X		X
0800	800mA	250V		120	310	0.12	X	X	X		X
1100	1.00A	250V		110	310	0.2	X	X	X	X	X
1125	1.25A	250V		100	360	0.31	X	X	X	X	X
1160	1.60A	250V		100	600	0.53	X	X	X	X	X
1200	2.00A	250V		85	500	0.98	X	X	X	X	X
1250	2.50A	250V		80	660	1.8	X	X	X	X	X
1315	3.15A	250V		90	950	3.1	X	X	X	X	X
1400	4.00A	250V	40 A / 250 VAC	80	920	6.7	X	X	X	X	X
1500	5.00A	250V	50 A / 250 VAC	80	1000	12.00	X	X	X	X	X
1630	6.30A*	250V	63 A / 250 VAC	70	1200	24.00	G	X	X		

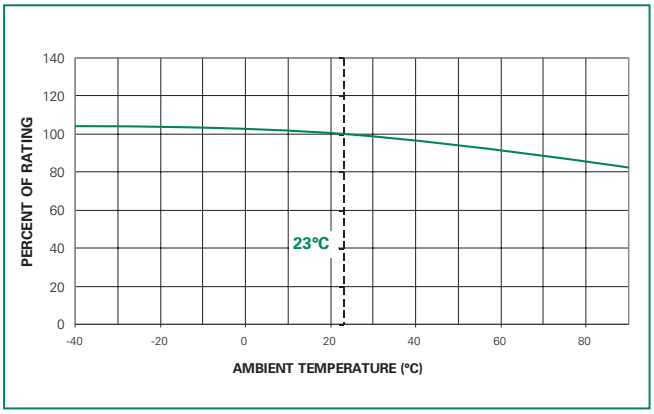
1 Per UL, approved breaking capacity is 50 A at 250 V.

* Conducting path min. 0.2 mm^2

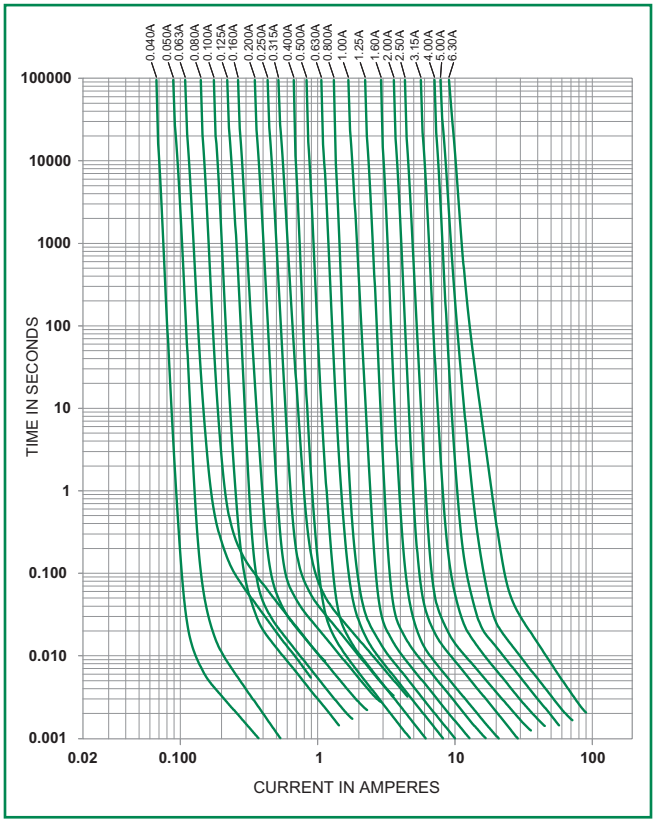
G = Expert Report pending

Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

Temperature Rerating Curve



Average Time Current Curves



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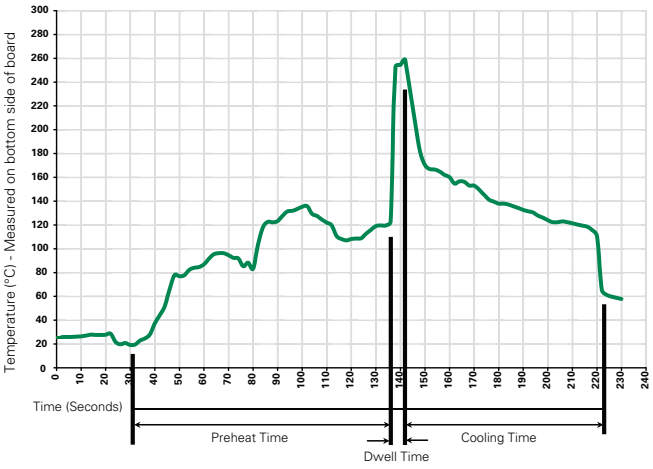
Soldering Parameters - Wave Soldering



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.

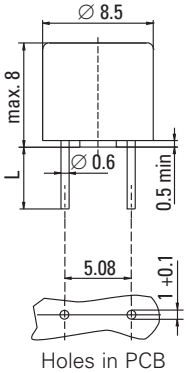
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

Materials	Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94 V-0 Round Pins: Copper, Tin-plated
Lead Pull Strength	10 N (EN 60068-2-21)
Solderability	260°C, ≤ 3s. (Wave) 350°C, ≤ 1s. (Soldering Iron)
Soldering Heat Resistance	260°C, 10s. (IEC 60068-2-20) 350°C, 3s. (Soldering Iron)

Operating Temperature	-40°C to +85°C (consider de-rating)
Climatic Category	-40°C to +85°C/21 days (IEC 60068-1,-2-1,-2-2,-2-78)
Stock Conditions	+10°C to +60°C RH ≤ 75% yearly average, without dew, maximum value for 30 days-95%
Vibration Resistance	24 cycles at 15 min. each (EN 60068-2-6) 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10G acceleration

Dimensions



Holes in PCB

Long Leads (L=18.8mm)
Short Leads (L=4.3mm)

Part Numbering System

370 xxxx 0000

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Packaging Code
0000 Tape/Ammopack (1,000 pcs.)
0410 Short Leads - Bulk (1,000 pcs.)

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
370 Series				
Tape & Ammopack	N/A	1,000	0000	N/A
Short Leads	N/A	1,000	0410	N/A

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