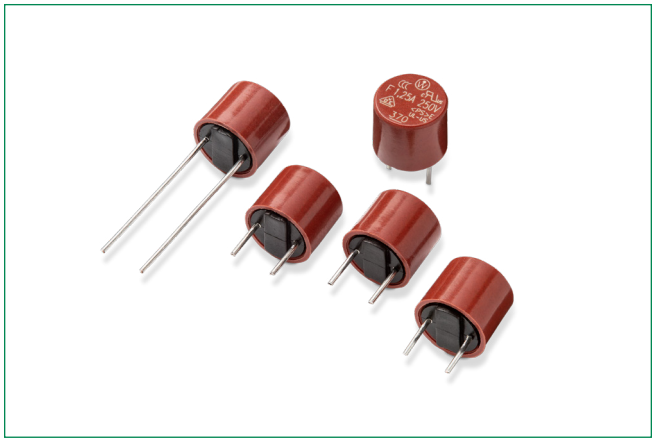
370 Series

TR5® Fuse, Fast Acting



Description

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

Features & Benefits

- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Lead-free, Halogen free and RoHS compliant
- Available from 0.040A to 6.3A
- UL Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14
- Conforms to EN/J 60127-1 and EN/J 60127-3
- Conforms to GB/T9364.1 and GB/T9364.3

Additional Information

Resources | Accessories | Samples

Applications

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

Agency Approvals

Agency	Certificate Number	Ampere Range
CE	NA	0.040A - 6.3A
UK CA	NA	0.040A - 6.3A
DVE	40021074 98941 40005316	0.050A - 0.080A 0.100A - 5A 6.3A
VDE	40024532	0.040A
c UL us	E67006	0.040A - 6.3A
PS E	NBK291021-JP1021	1A - 5A
CCC	2020970207000050	0.050A - 6.3A

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.**

© 2022 Littelfuse, Inc.
Specifications are subject to change without notice.
Revised: GD. 09/29/22

370 Series

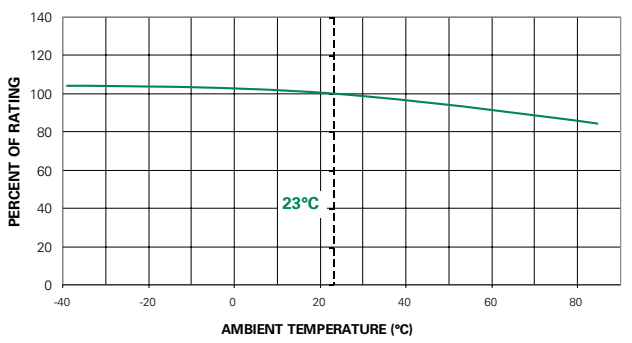
TR5® Fuse, Fast Acting

Electrical Characteristics

Amp Code	Rated Current	Voltage Rating	Breaking Capacity[3]	Nominal Cold Resistance (Ohms)[2]	Voltage Drop $1.0 \times I_N$ max. (mV)	Power Dissipation $1.5 \times I_N$ max. (mW)	Melting Integral $10 \times I_N$ max. (A^2s)	Agency Approvals						
								UK CA	CE	VDE	DVE	c UL us	PSE	
0040	40mA	250V	35A @ 250VAC	6.0000	900	100	0.0002	X	X	X	-	X	-	-
0050	50mA	250V		4.0224	320	80	0.0004	X	X	-	X	X	-	X
0063	63mA	250V		2.6740	350	100	0.0005	X	X	-	X	X	-	X
0080	80mA	250V		2.0000	370	120	0.0014	X	X	-	X	X	-	X
0100	100mA	250V		4.6100	600	130	0.0038	X	X	-	X	X	-	X
0125	125mA	250V		3.2400	550	172	0.0066	X	X	-	X	X	-	X
0160	160mA	250V		2.2520	500	165	0.0140	X	X	-	X	X	-	X
0200	200mA	250V		1.6900	465	190	0.0300	X	X	-	X	X	-	X
0250	250mA	250V		1.3420	400	250	0.0510	X	X	-	X	X	-	X
0315	315mA	250V		0.9300	380	250	0.1000	X	X	-	X	X	-	X
0400	400mA	250V		0.1610	120	135	0.0250	X	X	-	X	X	-	X
0500	500mA	250V		0.1210	120	155	0.0420	X	X	-	X	X	-	X
0630	630mA	250V		0.0920	115	200	0.0760	X	X	-	X	X	-	X
0800	800mA	250V		0.0760	120	310	0.1200	X	X	-	X	X	-	X
1100	1.00A	250V		0.0676	110	310	0.2000	X	X	-	X	X	X	X
1125	1.25A	250V		0.0518	100	360	0.3100	X	X	-	X	X	X	X
1160	1.60A	250V		0.0420	100	600	0.5300	X	X	-	X	X	X	X
1200	2.00A	250V		0.0325	85	500	0.9800	X	X	-	X	X	X	X
1250	2.50A	250V		0.0246	80	660	1.8000	X	X	-	X	X	X	X
1315	3.15A	250V		0.0184	90	950	3.1000	X	X	-	X	X	X	X
1400	4.00A	250V	40A / 250VAC	0.0129	80	920	6.7000	X	X	-	X	X	X	X
1500	5.00A	250V	50A / 250VAC	0.0105	80	1000	12.0000	X	X	-	X	X	X	X
1630	6.30A*	250V	63A / 250VAC	0.0073	70	1200	24.0000	X	X	-	X	X	-	X

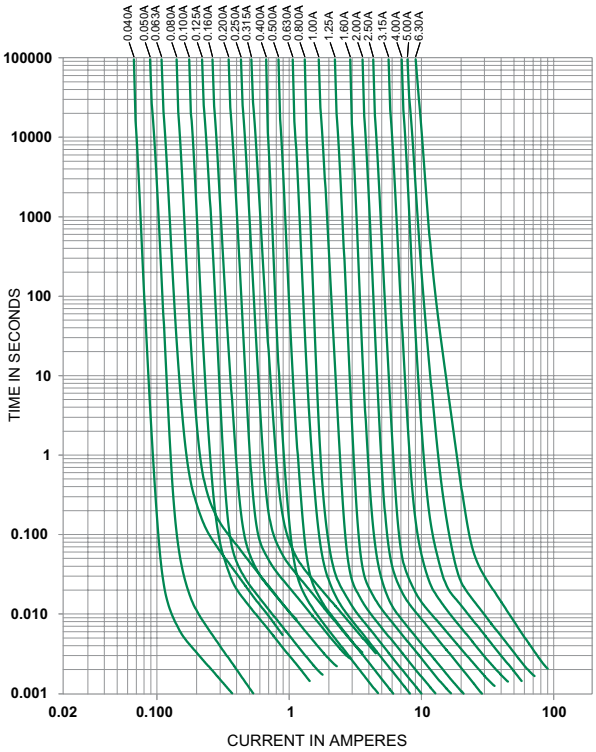
Notes:
1) 1.00 means the number one with two decimal places. 1,000 means the number one thousand.
2) Resistance is measured at 10% of rated current, 25°C.
3) Breaking Capacity may differ based on Agency Approval. See Agency Approval certificate for more details.

Temperature Rerating Curve



Note
1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

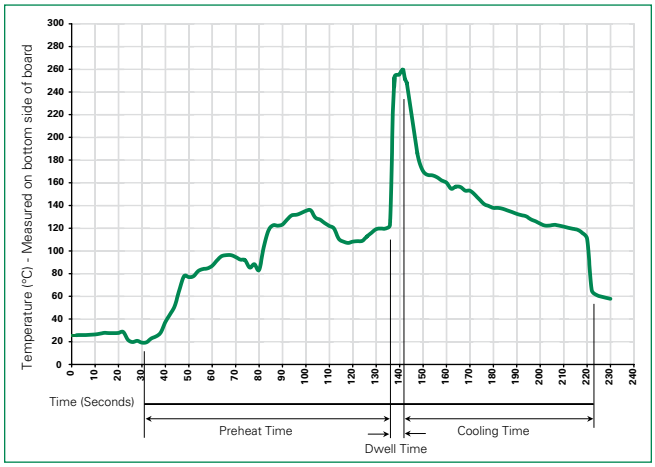
Average Time Current Curves



© 2022 Littelfuse, Inc.
Specifications are subject to change without notice.
Revised: GD. 09/29/22

370 Series
TR5® Fuse, Fast Acting

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

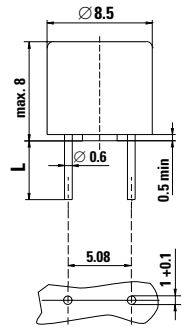
Recommended Hand-Solder Parameters:
Solder Iron Temperature: 350°C +/- 5°C
Heating Time: 5 seconds max.
Note: These devices are not recommended for IR or Convection Reflow process.

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 (IEC 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 (IEC 60068-2-6) 10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10G acceleration

Dimensions (mm)



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

Löcher in der Leiterplatte
Holes in the printed circuit board

Holes in PCB

Part Numbering System

370 xxxx 0000

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Packaging Code
0000 Tape/Ammopack (1000 pcs)
0410 Tape/Ammopack (1000 pcs)
0430 Tape/Ammopack (1000 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	0410/0430	N/A

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at: www.littelfuse.com/disclaimer-electronics.

© 2022 Littelfuse, Inc.
Specifications are subject to change without notice.
Revised: GD. 09/29/22