

373 Series

TR5® Fuse, Fast Acting



Description

The TR5® 373 Series fuses are fast-acting 250V rated and designed in accordance to UL 248 –14.

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 0.050A to 10A

Additional Information



Resources



Accessories



Samples

Electrical Characteristics

% of Ampere Rating	Ampere Rating	Opening Time
200%	50mA - 6.3A	5 Seconds, Max.
	8A - 10A	60 Seconds, Max.

Applications

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

Agency Approvals

Agency	Agency File Number	Ampere Range
SP	51378	0.050A - 6.3A
cULus	E67006	0.050A - 10A
UKCA	NA	50mA - 10A

Electrical Characteristics

Amp Code	Rated Current	Voltage Rating	Breaking Capacity	Nominal Cold Resistance (Ohms)	Voltage Drop 1.0xI _N max. (mV)	Power Dissipation 1.0xI _N max. (mW)	Melting Integral 10xI _N max. (A²s)	Agency Approvals		
								SP	cULus	UKCA
0050	50mA	250V	50A@250VAC	7.6250	1400	70	0.0001	X	X	X
0063	63mA	250V		4.6900	1300	85	0.0002	X	X	X
0080	80mA	250V		3.6500	1200	100	0.0004	X	X	X
0100	100mA	250V		8.9000	1100	110	0.0013	X	X	X
0125	125mA	250V		6.0550	1000	125	0.0019	X	X	X
0160	160mA	250V		4.1310	950	155	0.0040	X	X	X
0200	200mA	250V		3.2260	850	170	0.0065	X	X	X
0250	250mA	250V		2.2240	750	190	0.0140	X	X	X
0315	315mA	250V		1.5150	650	205	0.0320	X	X	X
0400	400mA	250V		0.2200	230	95	0.0160	X	X	X
0500	500mA	250V		0.1570	220	110	0.0250	X	X	X
0630	630mA	250V		0.1180	210	135	0.0450	X	X	X
0800	800mA	250V		0.0970	200	160	0.0690	X	X	X
1100	1.00A	250V		0.0710	190	190	0.1250	X	X	X
1125	1.25A	250V		0.0665	180	225	0.2000	X	X	X
1160	1.60A	250V		0.0480	170	275	0.3800	X	X	X
1200	2.00A	250V		0.0359	160	320	0.6300	X	X	X
1250	2.50A	250V		0.0305	150	375	1.2000	X	X	X
1315	3.15A	250V		0.0240	140	445	1.9000	X	X	X
1400	4.00A	250V		0.0185	130	520	3.5000	X	X	X
1500	5.00A	250V		0.0144	120	630	6.2000	X	X	X
1630	6.30A	250V		0.0133	115	1000	9.1000	X	X	X
1800	8.00A ¹	250V		0.0074	120	1600	30.0000	-	X	X
2100	10.00A ¹	250V		0.0059	110	2000	55.0000	-	X	X

¹ Conducting path cross-section minimum ≥ 0.2mm²

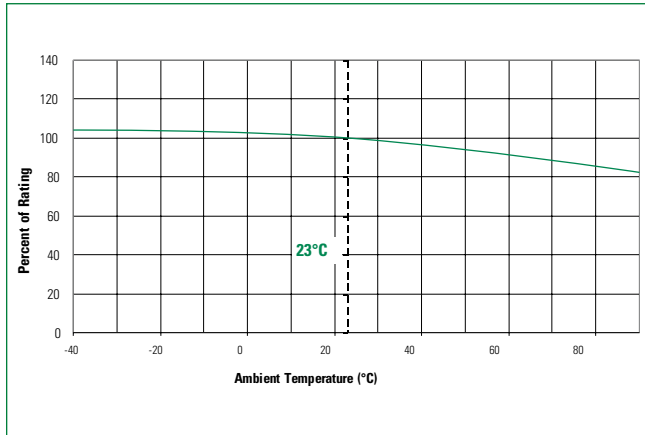
Notes: 1) 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

2) Resistance is measured at 10% of rated current, 25°C.

373 Series

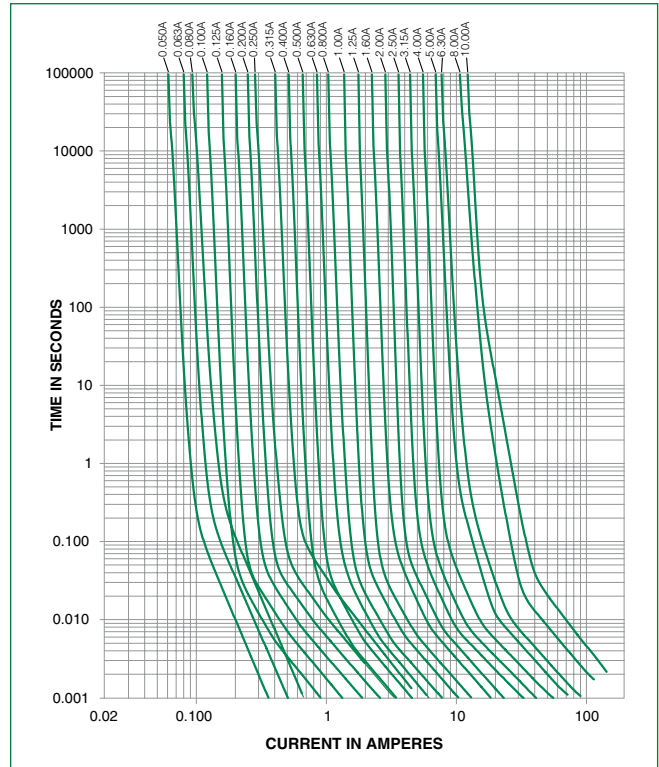
TR5® Fuse, Fast Acting

Temperature Re-rating Curve

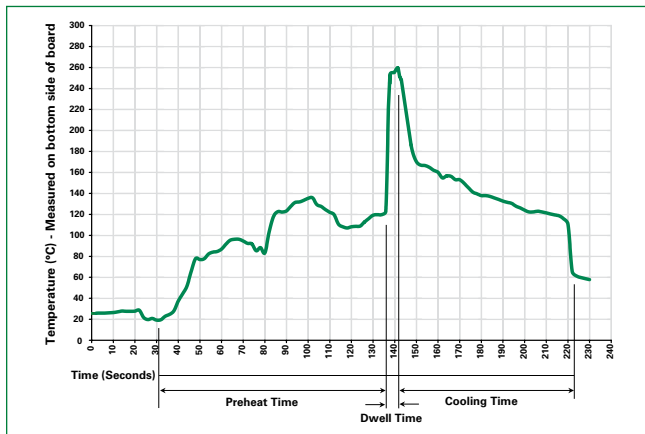


Note: 1. Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Average Time Current Curves



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.

373 Series

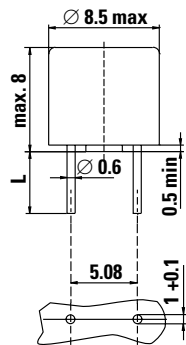
TR5® Fuse, Fast Acting

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/+85°C/21 days (EN 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% 24 cycles at 15 min. each (IEC 60068-2-6)
Vibration Resistance	10 - 60 Hz at 0.75 mm amplitude 60 - 2000 Hz at 10G's acceleration

Dimensions



Holes in PCB

Long Leads (L=18.8mm ± 0.3 mm)

Short Leads (L=4.3mm ± 0.3 mm)

Part Numbering System

	373	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.) 0430 Short Leads - Bulk (200 pcs.)		

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
373 Series				
Tape & Ammopack	N/A	1,000	0000	N/A
Short Leads	N/A	1,000	0410	N/A
Short Leads	N/A	200	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.