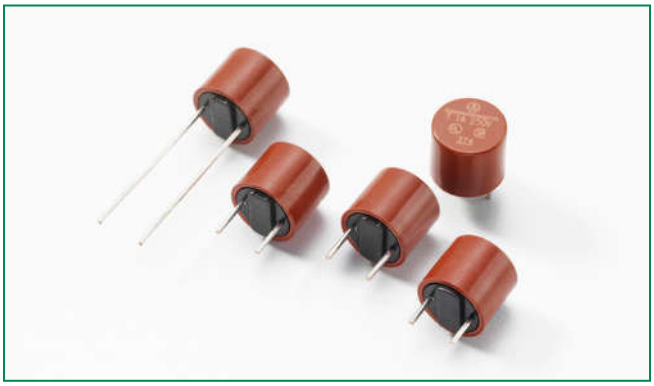
Littelfuse
Expertise Applied | Answers Delivered

374 Series, TR5 Fuse, Time Lag



Agency Approvals

Agency	Agency File Number	Ampere Range
	51378	0.050A - 6.3A
	E67006	0.050A - 10A

Description

The TR5® 374 Series fuses are Time–Lag 250V rated and designed in accordance to UL 248–14.

Features

- Halogen free, Lead-free and RoHS compliant
- Reduced PCB space requirements
- Direct solderable or plug–in versions
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Available from 0.050A to 10A

Applications

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

Electrical Characteristics

% of Ampere Rating	Opening Time
200%	60 Seconds,

Additional Information

Datasheet | **Resources** | **Samples**

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Radial Lead Fuses

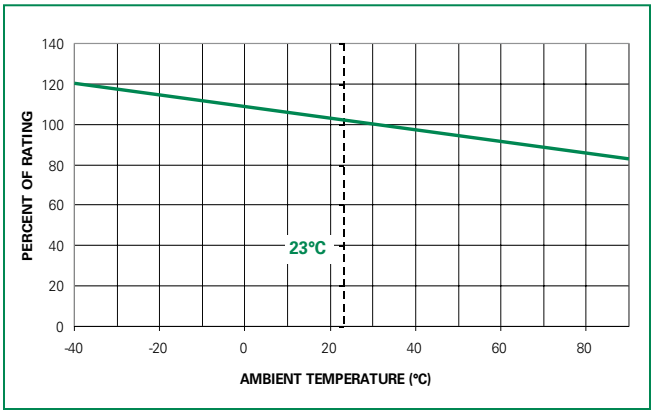
TR5® > Time-Lag Fuse > 374 Series

Electrical Characteristics

Amp Code	Rated Current	Voltage Rating	Breaking Capacity	Nominal Cold Resistance (Ohms)	Voltage Drop $1.0\times I_N$ max. (mV)	Power Dissipation $1.0\times I_N$ max. (mW)	Melting Integral $10\times I_N$ min. (A^2s)	Agency Approvals	
								SP®	cULus
0050	50mA	250V	50A@250VAC	12.5000	900	45	0.011	x	x
0063	63mA	250V		7.9200	800	50	0.015	x	x
0080	80mA	250V		5.8500	700	55	0.025	x	x
0100	100mA	250V		3.8400	600	60	0.039	x	x
0125	125mA	250V		2.9000	550	70	0.052	x	x
0160	160mA	250V		1.8300	480	80	0.083	x	x
0200	200mA	250V		1.2000	390	80	0.146	x	x
0250	250mA	250V		0.7600	350	90	0.313	x	x
0315	315mA	250V		0.5450	300	95	0.298	x	x
0400	400mA	250V		0.3510	250	100	0.552	x	x
0500	500mA	250V		0.2600	220	110	0.875	x	x
0630	630mA	250V		0.1700	210	135	1.191	x	x
0800	800mA	250V		0.1250	160	130	2.112	x	x
1100	1.00A	250V		0.1050	155	155	3.100	x	x
1125	1.25A	250V		0.0800	145	185	4.453	x	x
1160	1.60A	250V		0.0540	130	210	6.272	x	x
1200	2.00A	250V		0.0395	125	250	11.800	x	x
1250	2.50A	250V		0.0300	120	300	18.125	x	x
1315	3.15A	250V		0.0227	110	350	29.966	x	x
1400	4.00A	250V		0.0170	100	400	56.000	x	x
1500	5.00A	250V		0.0122	95	475	87.500	x	x
1630	6.30A	250V		0.0094	90	570	144.869	x	x
1800	8.00A	250V		0.0060	80	1000	220.800		x
2100	10.00A	250V		0.0050	90	1250	430.000		x

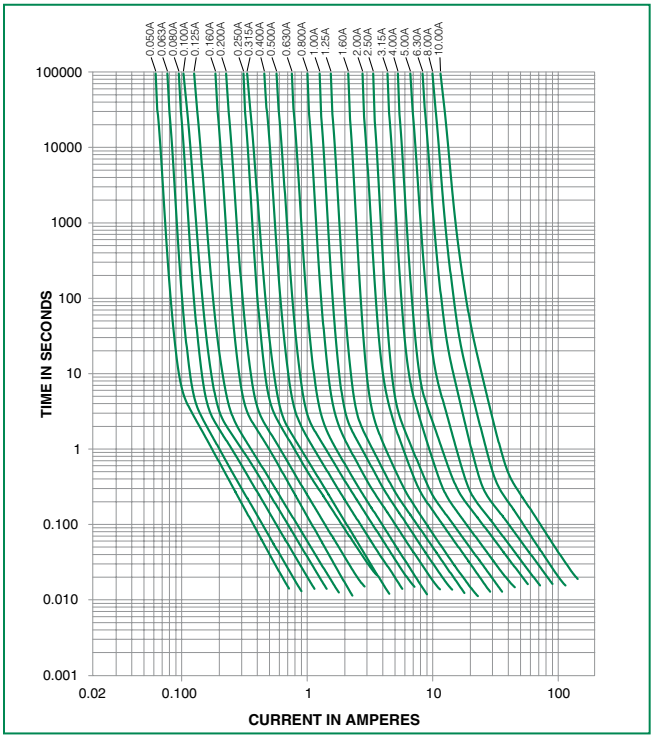
Notes:
1) 1.00 means the number one with two decimal places. 1,000 means the number one thousand.
2) Resistance is measured at 10% of rated current, 25ºC.

Temperature Re-rating Curve



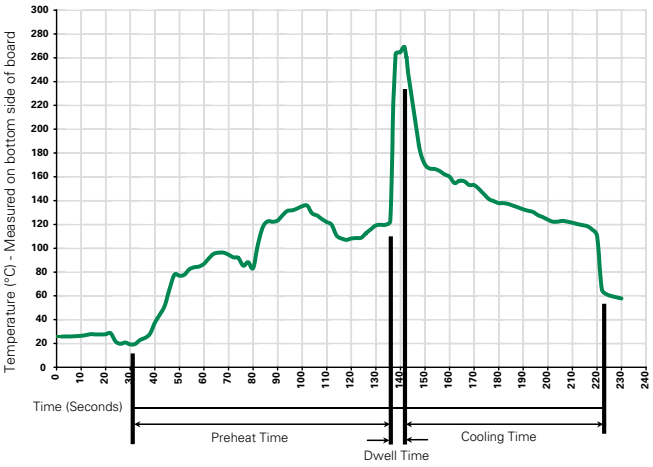
Note:
1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

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.

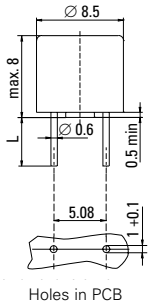
Note: These devices are not recommended for IR or Convection Reflow process.

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 (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 (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's acceleration

Dimensions



Holes in PCB

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

Part Numbering System

374 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
374 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

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