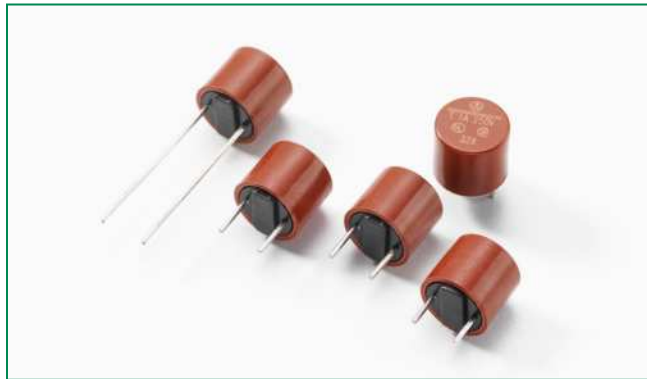




### 374 Series, TR5 Fuse, Time Lag



#### 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](#)



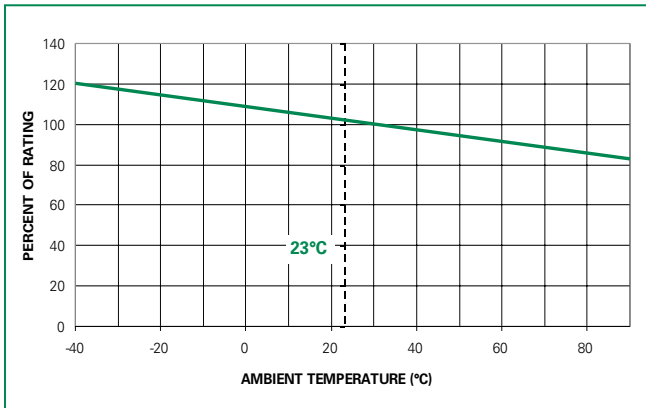
[Samples](#)

## 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 <sup>2</sup> s)	Agency Approvals	
								SP®	c UL US
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	

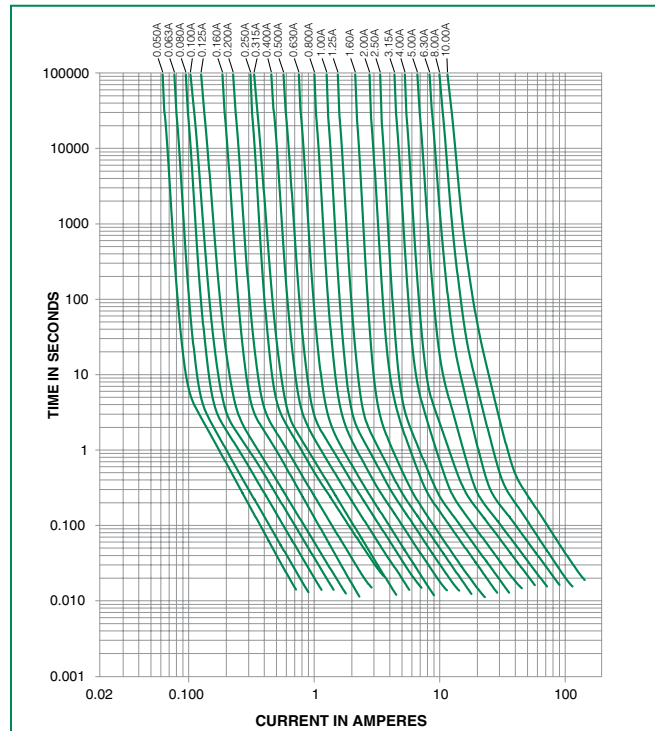
Notes:  
 1) 1.00 means the number one with two decimal places. 1,000 means the number one thousand.  
 2) Resistance is measured at 10% of rated current, 25°C.

## Temperature Re-rating Curve

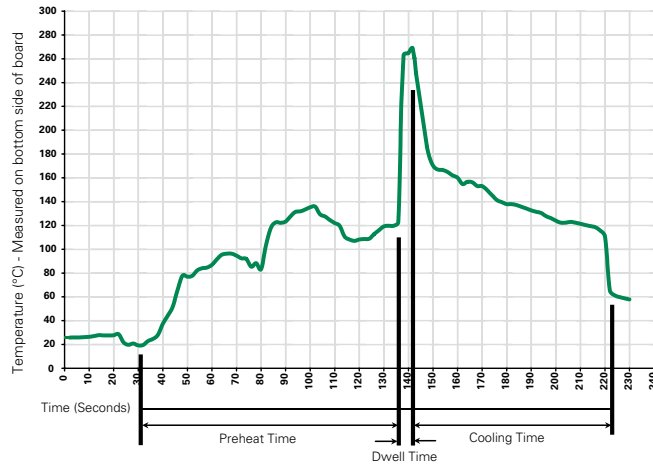


Note:  
 1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

## Average Time Current Curves



## Soldering Parameters - Wave Soldering



## Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
<b>Preheat:</b> (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100°C
Temperature Maximum:	150°C
Preheat Time:	60-180 seconds
<b>Solder Pot Temperature:</b>	260°C Maximum
<b>Solder Dwell Time:</b>	2-5 seconds

## Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350°C +/- 5°C  
Heating Time: 5 seconds max.

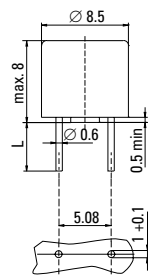
**Note: These devices are not recommended for IR or Convection Reflow process.**

## Product Characteristics

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

<b>Operating Temperature</b>	-40°C to +85°C (consider de-rating)
<b>Climatic Category</b>	-40°C/+85°C/21 days (IEC 60068-1,-2-1,-2-2,-2-78)
<b>Stock Conditions</b>	+10°C to +60°C RH ≤ 75% yearly average, without dew, maximum value for 30 days-95%
<b>Vibration Resistance</b>	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**

<b>Series</b>	374
<b>Amp Code</b>	xxxx
Refer to Amp Code column of Electrical Characteristics Table	
<b>Packaging Code</b>	0000
0000 Tape/Ampopack (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
<b>374 Series</b>				
Tape & Ampopack	N/A	1,000	0000	N/A
Short Leads	N/A	1,000	0410	N/A
Short Leads	N/A	200	0430	N/A