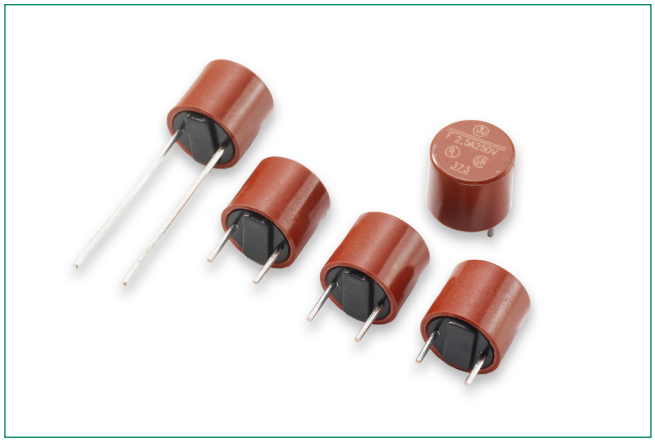
373 Series

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

Applications

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

Electrical Characteristics

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

Agency Approvals

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

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 $10 \times I_N$ max. (A^2s)	Agency Approvals		
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, 25ºC.

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Application testing is strongly recommended. Specifications are subject to change without notice.
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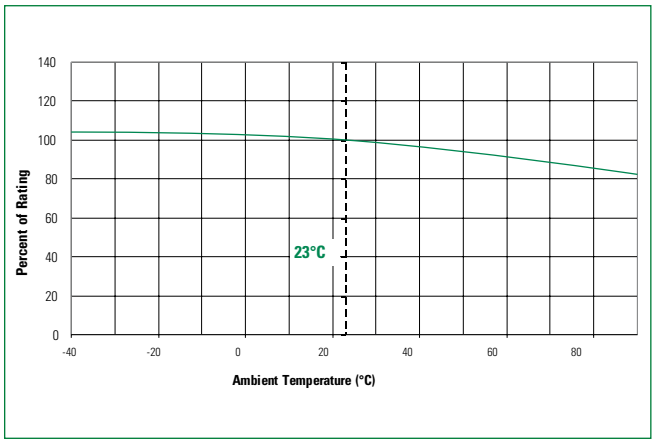
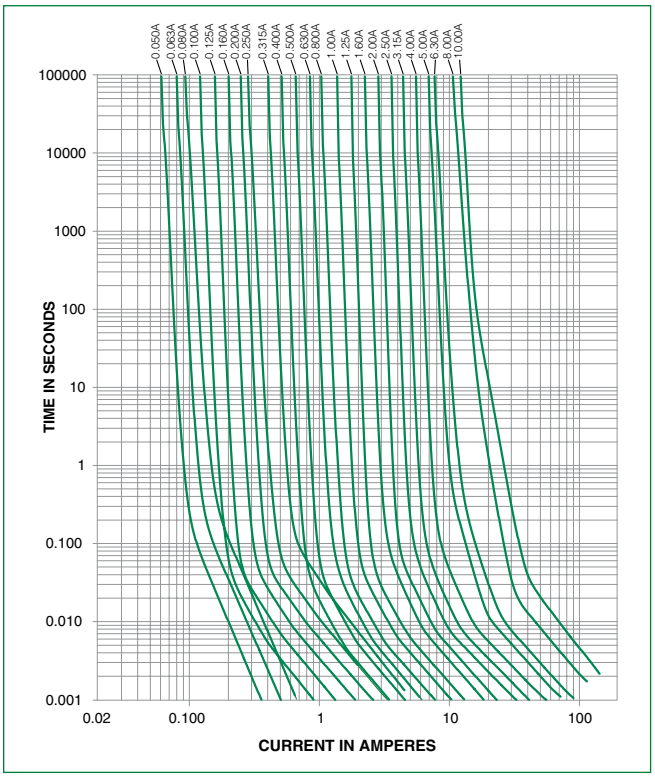
Temperature Re-rating Curve

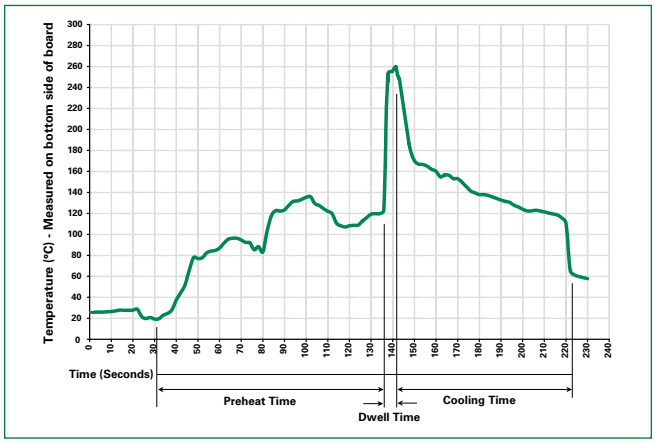


Note: 1. Rerating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

Average Time Current Curves



Soldering Parameters - Wave Soldering



Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
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.

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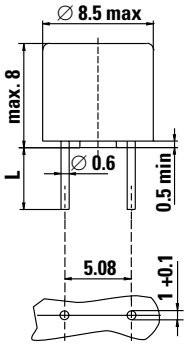
Product Characteristics

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%
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 ± 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

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