

383 Series

TR5® Time-Lag Fuse



Description

The 383 series are TR5® time-lag 300V rated fuses and designed in accordance to IEC 60127-3.

Features and Benefits

- 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
- Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14
- Conforms to EN/J60127-1 and EN/J60127-3
- CE Mark indicates compliance with Low-Voltage and RoHS Directives

Additional Information



Resources



Accessories



Samples

Applications

- Electronic Ballast

Electrical Characteristics for Series

% of Ampere Rating	Opening Time	
	1A - 6.3A	8A - 10A
150%	1 Hour, Min.	1 Hour, Min.
210%	2 Minutes, Max.	300 s, Max.
275%	400 ms, Min.; 10 s, Max.	1 s, Min.; 20 s, Max.
400%	150 ms, Min.; 3 s, Max.	150 ms, Min.; 3 s, Max.
1000%	20 ms, Min. ; 150 ms, Max.	20 ms, Min. ; 150 ms, Max.

Agency Approvals

Agency	Agency File Number	Ampere Range
VDE	40022712	4A - 5A
PS	NBK040322-JP1021 NBK200122-JP1021	1A - 5A 6.3A - 10A
UL/US	E67006	1A - 10A
UK/CA	N/A	1A - 10A

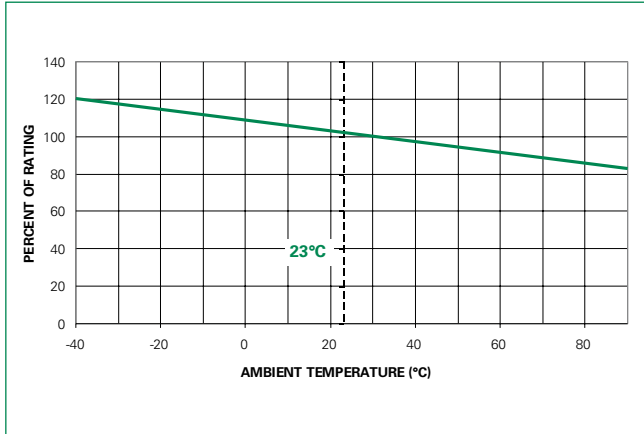
Electrical Characteristics Specifications by Item

Amp Code	Rated Current	Max Voltage Rating	Breaking Capacity	Nominal Cold Resistance (Ohms)	Voltage Drop 1.0xI _N max. (mV)	Power Dissipation 1.5xI _N max. (mW)	Melting Integral 10xI _N max. (A ² s)	Agency Approvals				
								UK/CA	VDE	PS	UL/US	CE
1100	1.00 A	300 V	100A@300VAC 50A@320VAC	0.0625	100	400	4.85	X	-	X	X	X
1125	1.25 A	300 V		0.0500	95	465	6.88	X	-	X	X	X
1160	1.60 A	300 V		0.0377	90	490	12.67	X	-	X	X	X
1200	2.00 A	300 V		0.0280	85	670	17.80	X	-	X	X	X
1250	2.50 A	300 V		0.0215	80	750	29.69	X	-	X	X	X
1315	3.15 A	300 V		0.0176	75	900	45.35	X	-	X	X	X
1400	4.00 A	300 V		0.0138	70	1200	72.00	X	X	X	X	X
1500	5.00 A	300 V	50A@320VAC 100A@250VAC	0.0108	65	1250	121.25	X	X	X	X	X
1630	6.30 A	300 V		0.0076	65	1400	148.84	X	-	X	X	X
1800	8.00 A	300 V		0.0059	63	1600	233.60	X	-	X	X	X
2100	10.00 A	300 V		0.0042	57	1600	365.00	X	-	X	X	X

383 Series

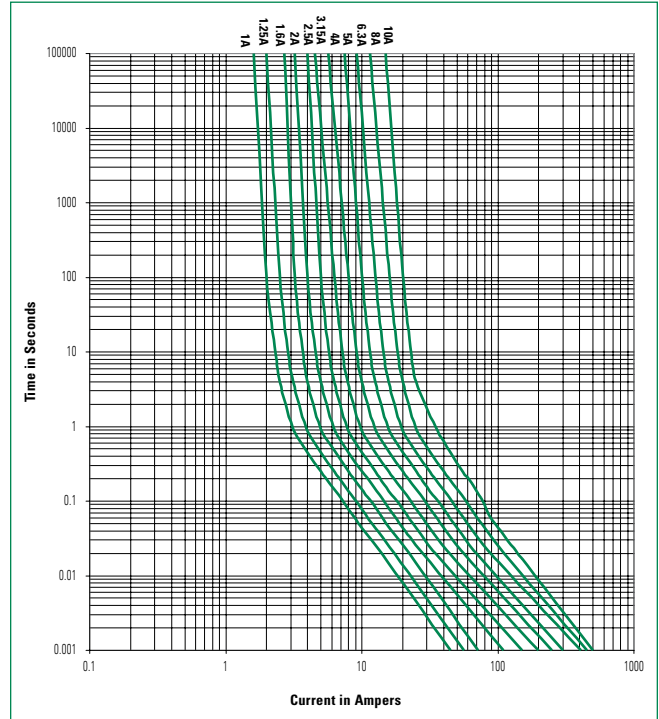
TR5® Time-Lag Fuse

Temperature Re-rating Curve

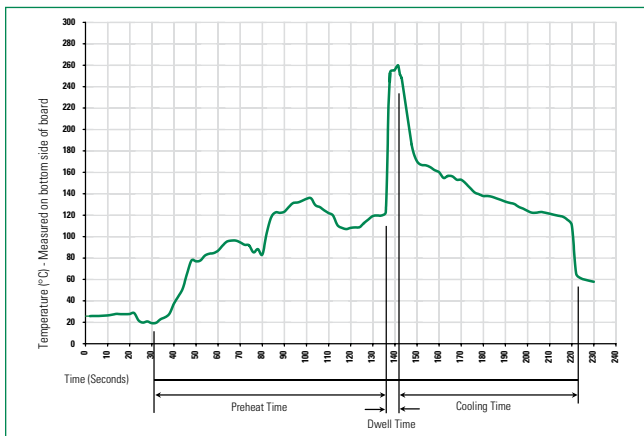


Note:
 1. Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

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.

383 Series

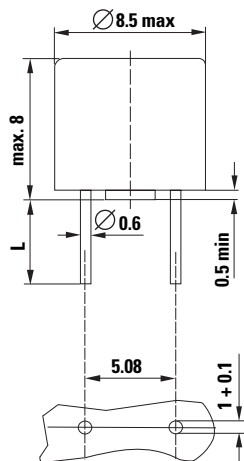
TR5® Time-Lag Fuse

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 re-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 10 g acceleration

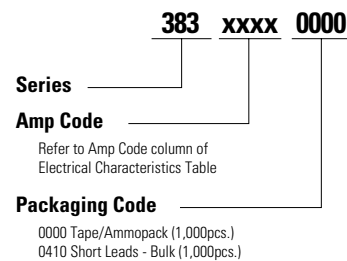
Dimensions



Long Leads (L=18.8mm ±0.3)

Short Leads (L=4.3mm ±0.3)

Part Numbering System



Packing

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
383 Series				
Tape & Ampopack	N/A	1,000	0000	N/A
Short Leads	N/A	1,000	0410	N/A

Disclaimer Notice - Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse. 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.