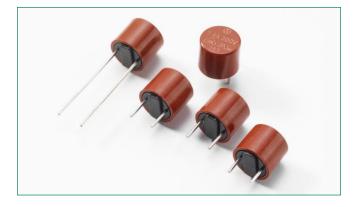


## 383 Series, TR5® Time-Lag Fuse



### **Agency Approvals**

Agency Agency File Number		Ampere Range
VDE	40022712	4A - 5A
PS E	JET1896-31007-2001 JET1896-31007-1006	1A - 5A 6.3A - 10A
c <b>FL</b> us	E67006	1A - 10A
Œ	N/A	1A - 10A

## **Electrical Characteristics for Series**

% of	Opening Time			
Ampere Rating	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.		

## **Electrical Characteristics Specifications by Item**

## Description

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

## 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

Electronic Ballast

Applications

Vibration resistantRecognized to UL/CSA/

HF ROHS @ CAL US CE

- 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



Samples

		Max Voltage Rating	Breaking Capacity	Nominal Cold Resistance (Ohms)	Voltage Drop 1.0×l <sub>N</sub> max. (mV)	Power Dissipation 1.5×I <sub>№</sub> max. (mW)	Melting Integral 10×I <sub>N</sub> max. (A²s)	Agency Approvals			
	Rated Current								PSE	c <b>FL</b> us	Œ
1100	1.00 A	300 V	100A@300VAC 50A@320VAC	0.0625	100	400	4.85	-	Х	Х	Х
1125	1.25 A	300 V		0.0500	95	465	6.88	-	Х	Х	Х
1160	1.60 A	300 V		0.0377	90	490	12.67	-	Х	Х	Х
1200	2.00 A	300 V		0.0280	85	670	17.80	-	Х	Х	Х
1250	2.50 A	300 V		0.0215	80	750	29.69	-	Х	Х	Х
1315	3.15 A	300 V		0.0176	75	900	45.35	-	Х	Х	Х
1400	4.00 A	300 V		0.0138	70	1200	72.00	Х	Х	Х	Х
1500	5.00 A	300 V	50A@320VAC 100A@250VAC	0.0108	65	1250	121.25	Х	Х	Х	Х
1630	6.30 A	300 V		0.0076	65	1400	148.84	-	Х	Х	Х
1800	8.00 A	300 V		0.0059	63	1600	233.60	-	Х	Х	Х
2100	10.00 A	300 V		0.0042	57	1600	365.00	-	Х	Х	Х



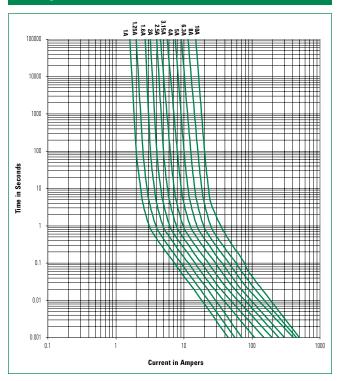
# **Radial Lead Fuses** TR5<sup>®</sup> > Time-Lag Fuse > 383 Series

#### **Temperature Re-rating Curve** 140 120 PERCENT OF RATING 100 80 60 40 23°C 20 0 -40 -20 0 20 40 60 80 AMBIENT TEMPERATURE (°C) Note:

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

**Soldering Parameters - Wave Soldering** 

## **Average Time Current Curves**



#### 300 280 Temperature (°C) - Measured on bottom side of board 260 240 220 200 180 160 140 120 100 80 60 40 20 ۰ <del>۱</del> ē 230-240-20ŝ 50-60 2 80 90 100-110-120-130-150-160-170-180-190-210-210-Time (Seconds) Preheat Time Cooling Time $\rightarrow$ Dwell

### **Recommended Process Parameters:**

Lead-Free Recommendation		
(Typical Industry Recommendation)		
100°C		
150°C		
60-180 seconds		
260°C Maximum		
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.



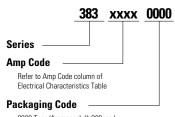
## **Product Characteristics**

Dimensions

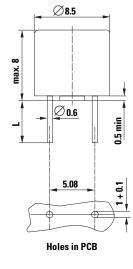
	Base/Cap: Brown Thermoplastic		
Materials	Polyamide PA 6.6, UL 94 V-0		
	Round Pins: Copper, Tin-plated		
Lead Pull Strength	10 N (IEC 60068-2-21)		
Caldenability	260°C, ≤ 3s. (Wave)		
Solderability	350°C, ≤ 1s. (Soldering Iron)		
Soldering Heat	260°C, 10s. (IEC 60068-2-20)		
Resistance	350°C, 3s. (Soldering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

## Part Numbering System



0000 Tape/Ammopack (1,000pcs.) 0410 Short Leads - Bulk (1,000pcs.)



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

Packing								
Packaging Option	Packaging Option Packaging Specification Quantity Quantity & Packaging Code		Quantity & Packaging Code	Taping Width				
383 Series								
Tape & Ammopack	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 woid for products used for any purpose on expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications as set forth in applicable Littelfuse documentation. The subject to Littelfuse shall be deemed woid 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.