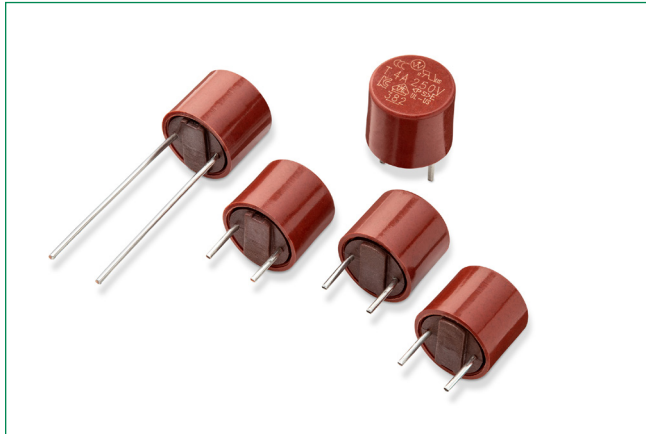


382 Series

TR5® Fuse, Time-Lag



Description

The 382 Series are TE5 Time-Lag type Fuses, 250V rated, with enhanced breaking capacity and designed in accordance to IEC 60127-3.

Features & Benefits

- Halogen free, Lead-free and RoHS compliant
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- 100A breaking capacity
- Internationally approved
- Low internal resistance
- Shock safe casing
- Vibration resistant
- Available from 1A to 10A
- UL Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-14
- Conforms to EN/IEC 60127-1 and EN/IEC 60127-3
- Conforms to J60127-1 and J60127-3
- Conforms to K60127-1 and K60127-3
- Conforms to GB/T9364.1 and GB/T9364.3

Additional Information



Resources



Accessories



Samples

Applications

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

Agency Approvals

Agency	Agency File Number	Ampere Range
	40018249	1A - 4A
	40018250	5A - 6.3A
	E67006	1A - 10A
	NBK040322-JP1021	1 - 5A
	NBK200122-JP1021	6.3 - 10A
	2020970207000057	1A - 6.3A
	SU05024-7003	1-2.5A
	SU05024-7002	3.15A
	SU05024-7001	4A
	SU05024-7004	5A
	SU05024-7005	6.3A
	NA	1A - 6.3A
	NA	1A - 6.3A

Electrical Characteristics

% 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 Sec., Max.	1 s, Min. ; 20 s, Max.
400%	150 ms, Min. ; 3 Sec., Max.	150 ms, Min. ; 3 Sec., Max.
1000%	20 ms, Min. ; 150 ms, Max.	20 ms, Min. ; 150 ms, Max.

382 Series

TR5® Fuse, Time-Lag

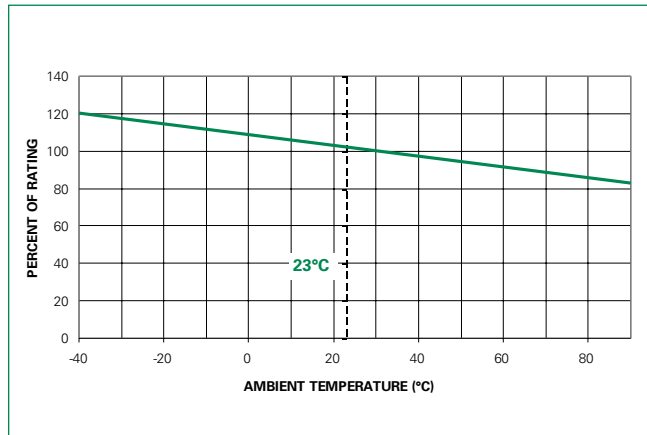
Electrical Characteristics

Amp Code	Rated Current	Voltage Rating	Breaking Capacity ³	Nominal Cold Resistance (Ohms) ²	Voltage Drop 1.0xI _N max. (mV)	Power Dissipation 1.5xI _N max. (mW)	Melting Integral 10xI _N min. (A ² s)	Agency Approvals						
								CE	UK CA	D'E	C	UL US	PS E	CCC
1100	1.00 A	250 V	100A @250VAC	0.0625	100	400	4.85	X	X	X	X	X	X	X
1125	1.25 A	250 V		0.0500	95	465	6.88	X	X	X	X	X	X	X
1160	1.60 A	250 V		0.0377	90	490	12.67	X	X	X	X	X	X	X
1200	2.00 A	250 V		0.0280	85	670	17.80	X	X	X	X	X	X	X
1250	2.50 A	250 V		0.0215	80	750	29.69	X	X	X	X	X	X	X
1315	3.15 A	250 V		0.0176	75	900	45.35	X	X	X	X	X	X	X
1400	4.00 A	250 V		0.0138	70	1200	72.00	X	X	X	X	X	X	X
1500	5.00 A	250 V		0.0108	65	1250	121.25	X	X	X	X	X	X	X
1630	6.30 A	250 V		0.0076	65	1400	148.84	X	X	X	X	X	X	X
1800	8.00 A	250 V		0.0059	63	1600	233.60	-	-	-	X	X	-	-
2100	10.00 A	250 V	0.0042	57	1600	365.00	-	-	-	X	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.
3. Breaking Capacity may differ based on Agency Approval. See Agency Approval certificate for more details.

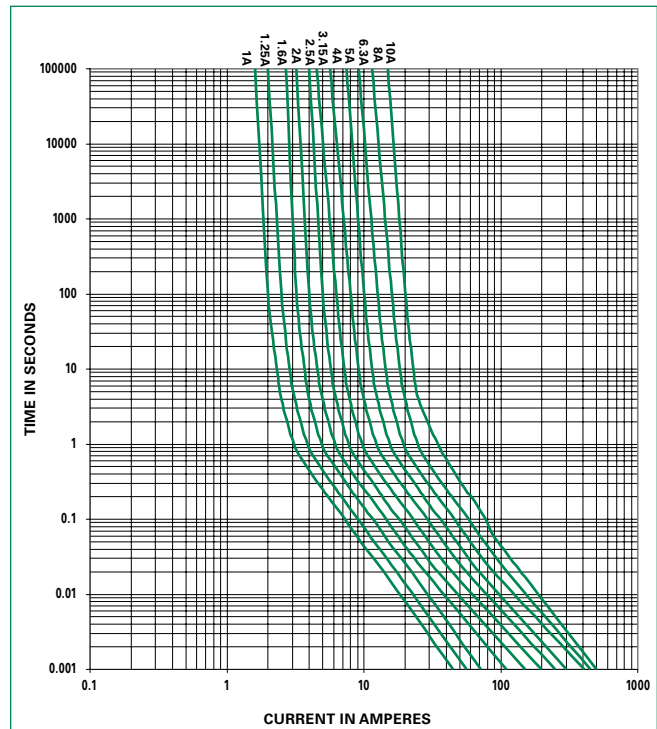
Temperature Derating Curve



Note:

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

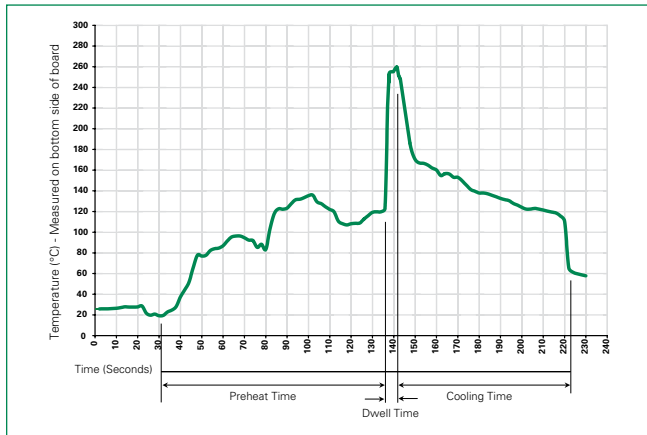
Average Time Current Curves



382 Series

TR5® Fuse, Time-Lag

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.

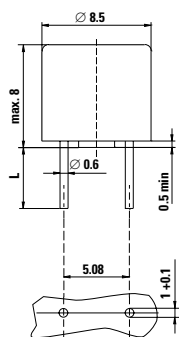
Note: These devices are not recommended for IR or Convection Reflow process.

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 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 (mm)



Long Leads (L=18.8mm ±0.3)
Short Leads (L=4.3mm ±0.3)

Holes in PCB

Part Numbering System

382 **xxxx** **0000**

Series

Amp Code

Refer to Amp Code column of
Electrical Characteristics Table

Packaging Code

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
382 Series				
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

Disclaimer Notice - 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.