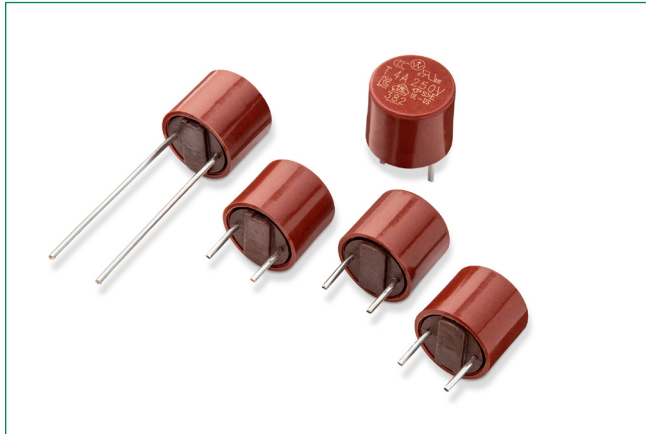


# 382 Series

## 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
		SU05024-7003
	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

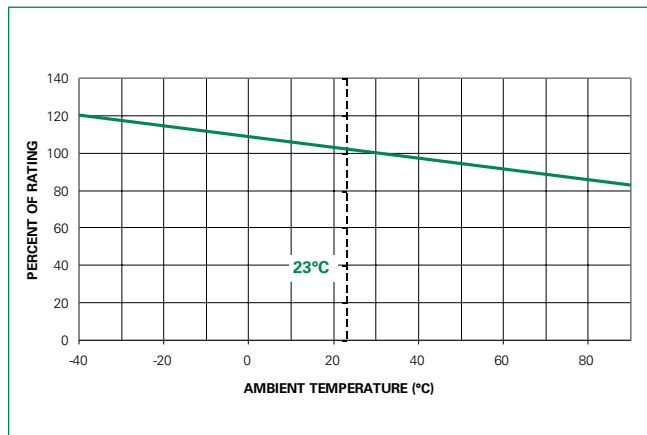
### Electrical Characteristics

Amp Code	Rated Current	Voltage Rating	Breaking Capacity <sup>3</sup>	Nominal Cold Resistance (Ohms) <sup>2</sup>	Voltage Drop 1.0xI <sub>N</sub> max. (mV)	Power Dissipation 1.5xI <sub>N</sub> max. (mW)	Melting Integral 10xI <sub>N</sub> min. (A <sup>2</sup> s)	Agency Approvals						
								CE	UK CA	D'E	cULus	PS E	CCC	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.

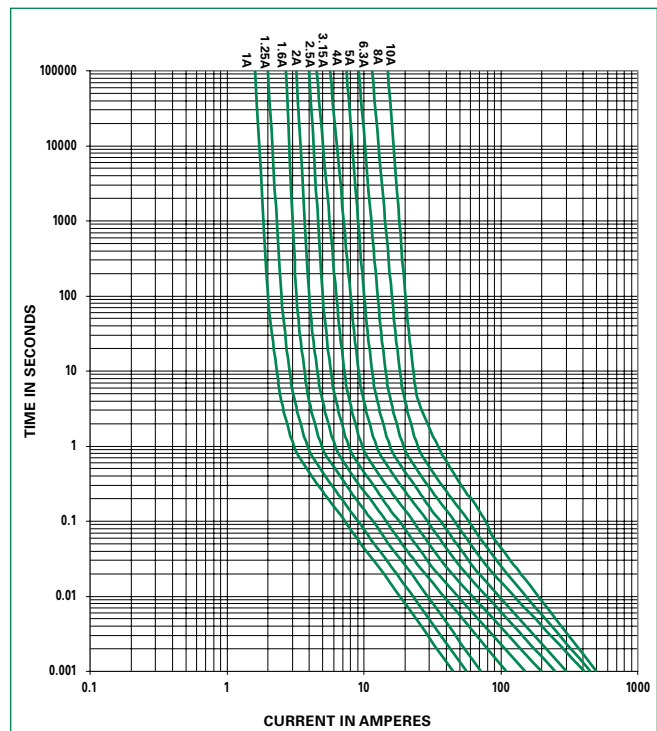
### Temperature Derating Curve



**Note:**

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

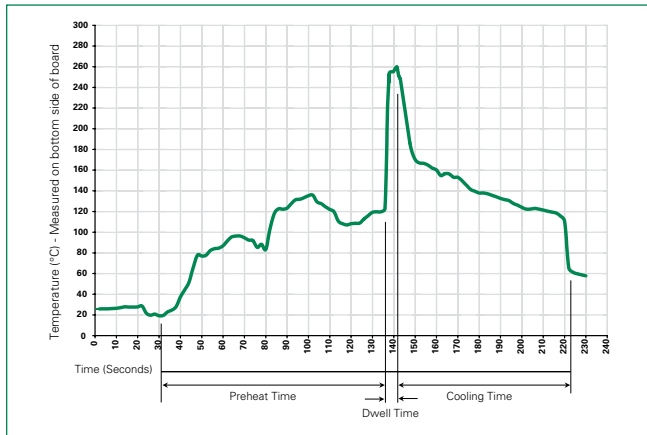
### Average Time Current Curves



# 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.

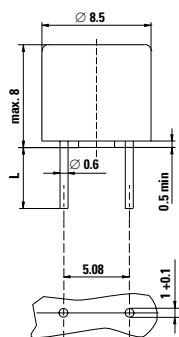
**Note:** These devices are not recommended for IR or Convection Reflow process.

### Product Characteristics

<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 re-rating)
<b>Climatic Category</b>	-40°C to +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 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/Ampack (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>382 Series</b>				
Tape & Ampack	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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