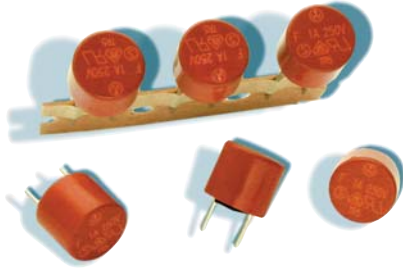


# No. 370 / TR5®



## IEC 60127-3/III, 250 V, F

**Time-Current Characteristic**  
Quick Acting (F)

**Standard**  
IEC 60127-3/III

**Approvals**  
VDE  
SEMKO  
cULus Recognized  
METI  
CCC

### Features

- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shocksafe casing
- Vibration resistant
- Halogen free

### Specifications

**Packaging**

- 000: Tape/Ampopack (1,000 pcs.)
- 041: Short Leads - Bulk (1,000 pcs.)

**Materials**

- Base/Cap: Brown Thermoplastic  
Polyamide PA 6.6, UL 94 V0
- Round Pins: Copper, Sn plated

**Operating Temperature**

-40 °C to +85 °C (consider de-rating)

**Climatic Category**

-40 °C/+85 °C/21 days  
(IEC 60068-1,-2-1,-2-2,-2-78)

**Stock Conditions**

+10 °C to +60 °C  
relative humidity ≤ 75 % yearly average,  
without dew, maximum value for 30 days-95 %

**Vibration Resistance**

24 cycles at 15 min. each (EN 60068-2-6)  
10 - 60 Hz at 0.75 mm amplitude  
60 - 2000 Hz at 10 g acceleration

**Lead Pull Strength**

10 N (EN 60068-2-21)

**Solderability**

260 °C, ≤ 3 s (Wave)  
350 °C, ≤ 3 s (Soldering iron)

**Soldering Heat Resistance**

260 °C, 10 s (IEC 60068-2-20)

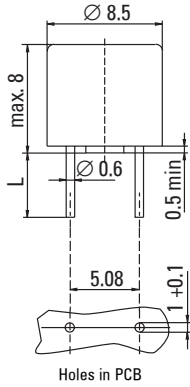
**Marking**

Ⓜ, 370, 250 V, F, Current Rating, Approvals

**Unit Weight**

0.77 g (approx.)

**Dimensions (mm)**



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



**Limits for Pre-arcing Time**

Rated Current	1.5 x I <sub>N</sub>	2.1 x I <sub>N</sub>	2.75 x I <sub>N</sub>	4 x I <sub>N</sub>	10 x I <sub>N</sub>
40 mA ... 6.30 A	> 1h	< 30 min	10 ms ... 3 s	3 ms ... 300 ms	< 20 ms



**Permissible continuous operating current is ≤ 100 % at ambient temperature of 23 °C (73.4 °F).**

Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I <sub>N</sub> Ⓜ max. (mV)	Power Dissipation 1.5 x I <sub>N</sub> Ⓜ max. (mW)	Melting Integral 10 x I <sub>N</sub> Ⓜ max. (A <sup>2</sup> s)	Approvals				
							VDE	SEMKO	cURus	METI-T-Mark	CCC
40mA	0040	250V		900	100	0.0002					
50mA	0050	250V		320	80	0.00035	•	•	•	•	
63mA	0063	250V		350	100	0.0005	•	•	•	•	
80mA	0080	250V		370	120	0.0014	•	•	•	•	
100mA	0100	250V		600	130	0.0038	•	•	•	•	
125mA	0125	250V		550	172	0.0066	•	•	•	•	
160mA	0160	250V		500	165	0.014	•	•	•	•	
200mA	0200	250V		465	190	0.03	•	•	•	•	
250mA	0250	250V		400	250	0.051	•	•	•	•	
315mA	0315	250V	35 A / 250 V AC <sup>1</sup>	380	250	0.1	•	•	•	•	
400mA	0400	250V	50-60Hz cos φ=1.0	120	135	0.025	•	•	•	•	
500mA	0500	250V		120	155	0.042	•	•	•	•	
630mA	0630	250V		115	200	0.076	•	•	•	•	
800mA	0800	250V		120	310	0.12	•	•	•	•	
1.00A	1100	250V		110	310	0.2	•	•	•	•	
1.25A	1125	250V		100	360	0.31	•	•	•	•	
1.60A	1160	250V		100	600	0.53	•	•	•	•	
2.00A	1200	250V		85	500	0.98	•	•	•	•	
2.50A	1250	250V		80	660	1.8	•	•	•	•	
3.15A	1315	250V		90	950	3.1	•	•	•	•	
4.00A	1400	250V		80	920	6.7	•	•	•	•	
5.00A	1500	250V		80	1000	12.00	•	•	•	•	
6.30A*	1630	250V		70	1200	24.00	G	•	•	•	

<sup>1</sup> Per UL, approved breaking capacity is 50 A at 250 V. \* Conducting path min. 0.2 mm<sup>2</sup>  
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

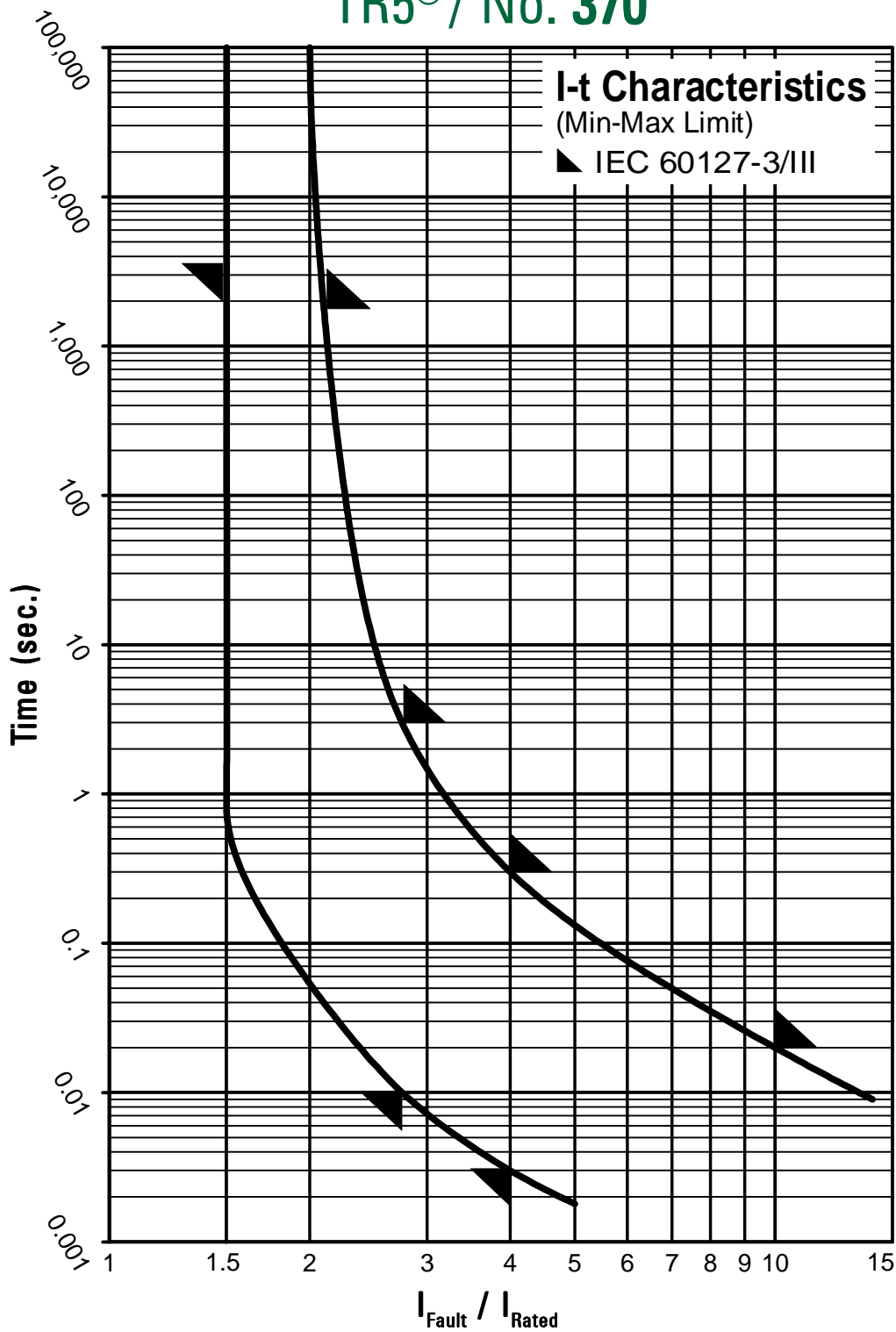
G = Expert Report pending

**Order Information**

Qty.	Order-Number	Series	Amp Code	Packaging
		370		

Specifications are subject to change without notice

## TR5<sup>®</sup> / No. 370



Contact Littelfuse for individual I-t curves

# No. 372 / TR5®



IEC 60127-3/IV, 250 V, T

Lead Free

**Time-Current Characteristic**  
Time Lag (T)

**Standard**  
IEC 60127-3/IV

**Approvals**  
VDE  
SEMKO  
cULus Recognized  
METI  
CCC

## Features

- Lead Free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shocksafe casing
- Halogen free

## Specifications

### Packaging

- 000: Tape/Ammopack (1,000 pcs.)
- 041: Short Leads - Bulk (1,000 pcs.)

### Materials

- Base/Cap: Brown Thermoplastic Polyamide PA 6.6, UL 94V0
- Round Pins: Copper, Sn plated

### 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,-78)

### Stock Conditions

- +10 °C to +60 °C
- relative humidity ≤ 75 % yearly average, without dew, maximum value for 30 days-95 %

### Vibration Resistance

- 24 cycles at 15 min. each (EN 60068-2-6)
- 10 - 60 Hz at 0.75 mm amplitude
- 60 - 2000 Hz at 10 g acceleration

### Lead Pull Strength

10 N (EN 60068-2-21)

### Solderability

- 260 °C, ≤ 3 s (Wave)
- 350 °C, ≤ 3 s (Soldering iron)

### Soldering Heat Resistance

260 °C, 10 s (IEC 60068-2-20)

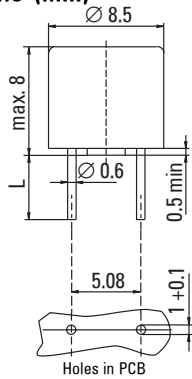
### Marking

Ⓜ, 372, 250 V, T, Current Rating, Approvals

### Unit Weight

0.77 g (approx.)

### Dimensions (mm)



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



Limits for Pre-arcing Time					
Rated Current	1.5 x I <sub>N</sub>	2.1 x I <sub>N</sub>	2.75 x I <sub>N</sub>	4 x I <sub>N</sub>	10 x I <sub>N</sub>
40 mA ... 6.30 A	> 1 h	< 2 min	400 ms ... 10s	150 ms ... 3 s	20 ms ... 150 ms



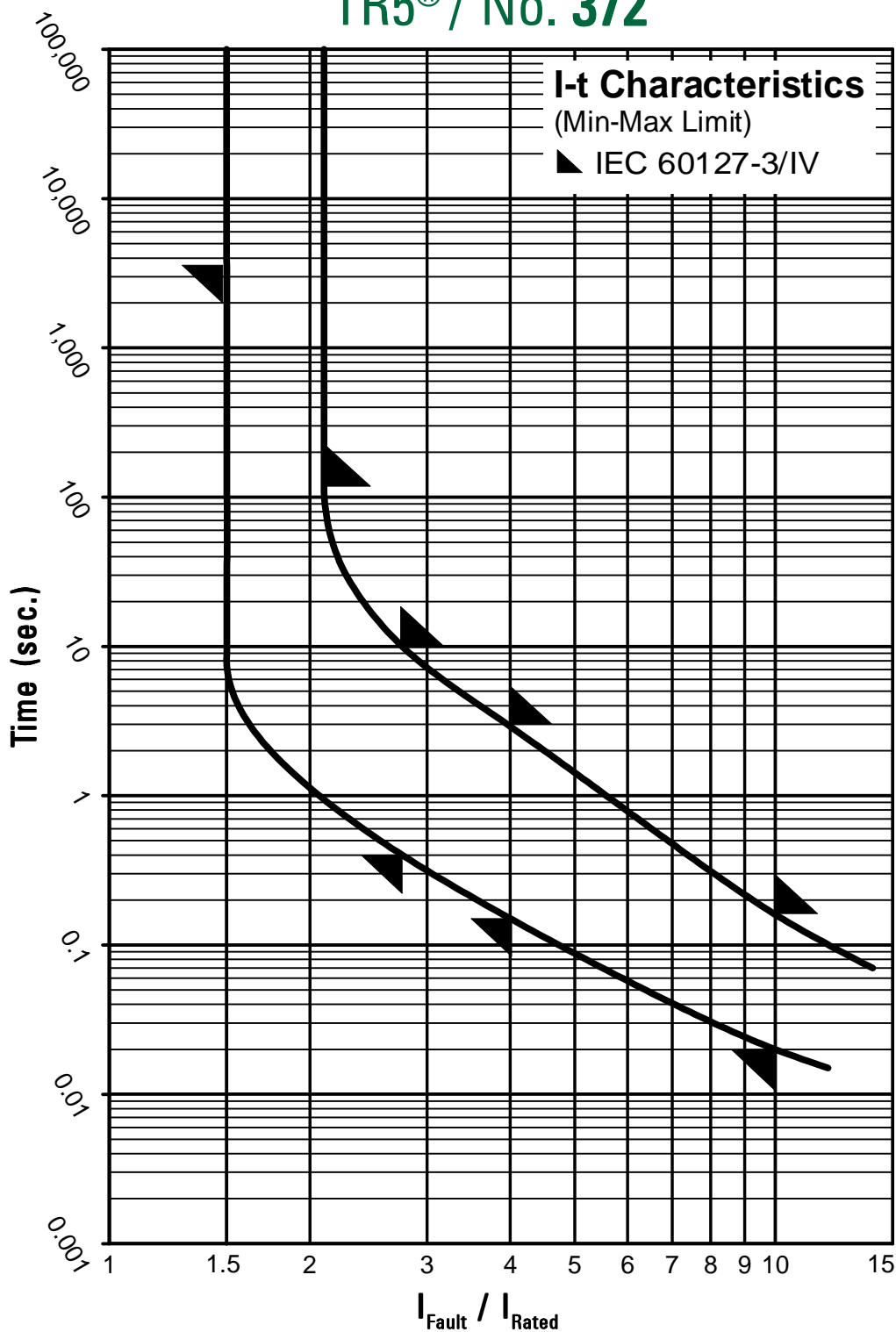
Permissible continuous operating current is ≤ 100 % at ambient temperature of 23 °C (73.4 °F).												
Rated Current	Amp Code	Voltage Rating	Breaking Capacity max. (mV)	Voltage Drop 1.0 x I <sub>N</sub> Ⓜ max. (mW)	Power Dissipation 1.5 x I <sub>N</sub> Ⓜ min. (A <sup>2</sup> s)	Melting Integral 10 x I <sub>N</sub> Ⓜ	Approvals					
							VDE	SEMKO	cULus	METI	PSE-JET**	CCC
40mA	0040	250V		900	90	0.009						
50mA	0050	250V		500	70	0.01	•	•	•	•	•	•
63mA	0063	250V		400	80	0.02	•	•	•	•	•	•
80mA	0080	250V		370	100	0.023	•	•	•	•	•	•
100mA	0100	250V		300	110	0.047	•	•	•	•	•	•
125mA	0125	250V		260	120	0.066	•	•	•	•	•	•
160mA	0160	250V		200	130	0.14	•	•	•	•	•	•
200mA	0200	250V		170	140	0.20	•	•	•	•	•	•
250mA	0250	250V		150	150	0.28	•	•	•	•	•	•
315mA	0315	250V	35A / 250 V AC <sup>1</sup>	140	160	0.36	•	•	•	•	•	•
400mA	0400	250V	50-60Hz	130	170	0.9	•	•	•	•	•	•
500mA	0500	250V	cos φ = 1.0	125	180	1.3	•	•	•	•	•	•
630mA	0630	250V		120	200	2.5	•	•	•	•	•	•
800mA	0800	250V		110	220	3.8	•	•	•	•	•	•
1.00A	1100	250V		110	360	5.5	•	•	•	•	•	•
1.25A	1125	250V		95	450	9	•	•	•	•	•	•
1.60A	1160	250V		95	450	14	•	•	•	•	•	•
2.00A	1200	250V		85	600	23	•	•	•	•	•	•
2.50A	1250	250V		80	700	35	•	•	•	•	•	•
3.15A	1315	250V		80	1100	60	•	•	•	•	•	•
4.00A	1400	250V	40A / 250 V AC	75	1200	95	•	•	•	•	•	•
5.00A	1500	250V	50A / 250 V AC	80	1300	94	G	•	•	•	•	•
6.30A*	1630	250V		58	1250	105	G	•	•	•	•	•

<sup>1</sup> Per UL, approved breaking capacity is 50 A at 250 V. <sup>\*</sup> Conducting path min. 0.2 mm<sup>2</sup> <sup>\*\*</sup>PSE-JET and K-Mark for China production <sup>G</sup> Expert Report  
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

Order Information	Qty.	Order-Number	Series	Amp Code	Packaging
				372	

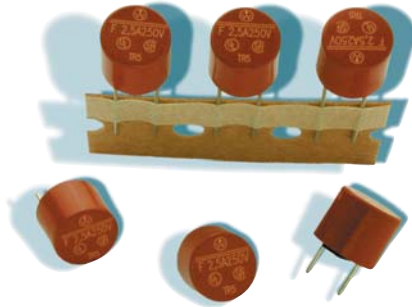
Specifications are subject to change without notice

## TR5<sup>®</sup> / No. 372

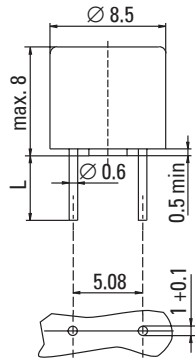


Contact Littelfuse for individual I-t curves

## No. 373 / TR5®



### Dimensions (mm)



Holes in PCB  
 Long Leads (L=18.8 mm)  
 Short Leads (L=4.3 mm)

## UL 248-14, 250 V, F lead free

**Time-Current Characteristic**  
 Quick Acting (F)

**Standard**  
 UL 248-14  
 CSA C22.2 No. 248.14

**Approvals**  
 UL Listed  
 CSA Certified

### Features

- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shocksafe casing
- Vibration resistant
- Halogen free

## Specifications

**Packaging**  
 000: Tape/Ampack (1,000 pcs.)  
 041: Short Leads - Bulk (1,000 pcs.)

**Materials**  
 Base/Cap: Brown Thermoplastic  
 Polyamide PA 6.6, UL 94V0  
 Round Pins: Copper, Sn plated

**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  
 relative humidity ≤ 75 % yearly average,  
 without dew, maximum value for 30 days-95 %

**Vibration Resistance**  
 24 cycles at 15 min. each (EN 60068-2-6)  
 10 - 60 Hz at 0.75 mm amplitude  
 60 - 2000 Hz at 10 g acceleration

**Lead Pull Strength**  
 10 N (EN 60068-2-21)

**Solderability**  
 260 °C, ≤ 3 s (Wave)  
 350 °C, ≤ 3 s (Soldering iron)

**Soldering Heat Resistance**  
 260 °C, 10 s (IEC 60068-2-20)

**Marking**  
 Ⓢ, 373, 250 V, F, Current Rating, Approvals

**Unit Weight**  
 0.77 g (approx.)



### Limits for Pre-arcing Time

Rated Current	$2.0 \times I_N$ Ⓢ
50 mA ... 6.30 A	< 5 s
8.00 A ... 10.00A	< 60 s

### Permissible continuous operating current is ≤ 70 % at ambient temperature of 23 °C (73.4 °F).

Rated Current	Amp Code	Voltage Rating	Breaking Capacity	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 <sup>2</sup> s)	Approvals UL CSA cULus
50mA	0050	250V		1400	70	0.0001	• •
63mA	0063	250V		1300	85	0.00023	• •
80mA	0080	250V		1200	100	0.00037	• •
100mA	0100	250V		1100	110	0.0013	• •
125mA	0125	250V		1000	125	0.0019	• •
160mA	0160	250V		950	155	0.004	• •
200mA	0200	250V		850	170	0.0065	• •
250mA	0250	250V		750	190	0.014	• •
315mA	0315	250V		650	205	0.032	• •
400mA	0400	250V	50A/250V AC 50-60 Hz cos φ=1.0	230	95	0.016	• •
500mA	0500	250V		220	110	0.025	• •
630mA	0630	250V		210	135	0.045	• •
800mA	0800	250V		200	160	0.069	• •
1.00A	1100	250V		190	190	0.125	• •
1.25A	1125	250V		180	225	0.2	• •
1.60A	1160	250V		170	275	0.38	• •
2.00A	1200	250V		160	320	0.63	• •
2.50A	1250	250V		150	375	1.2	• •
3.15A	1315	250V		140	445	1.9	• •
4.00A	1400	250V		130	520	3.5	• •
5.00A	1500	250V		120	630	6.2	• •
6.30A	1630	250V		115	1000	9.1	• •
8.00A <sup>1</sup>	1800	250V		120	1600	30	• •
10.00A <sup>1</sup>	2100	250V		110	2000	55	• •

<sup>1</sup> Conducting path cross-section minimum ≥ 0.2mm<sup>2</sup>

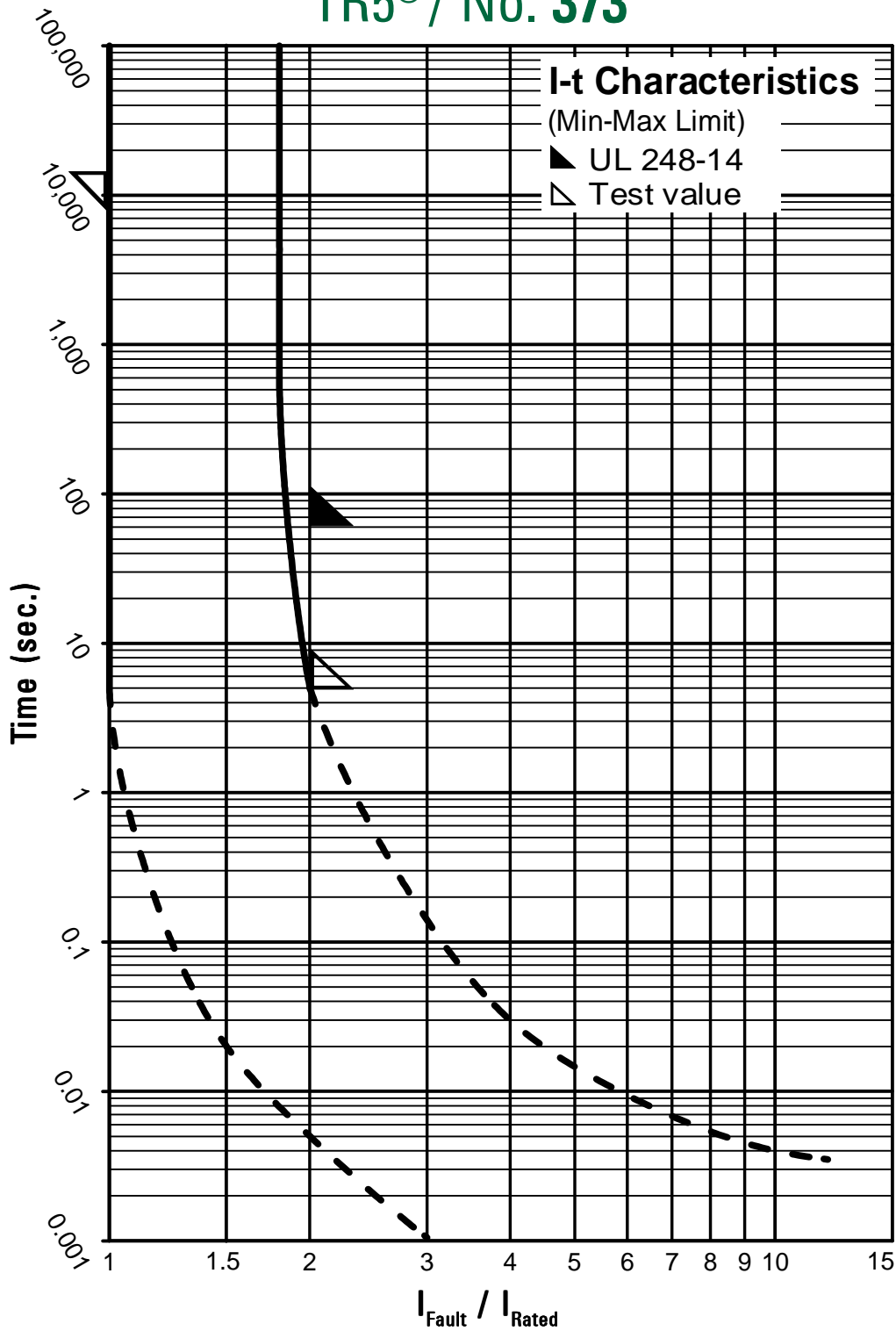
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

### Order Information

Qty.	Order-Number	Series	Amp Code	Packaging
		373		

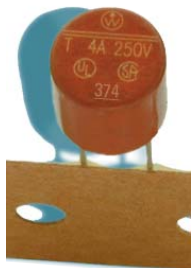
Specifications are subject to change without notice

## TR5<sup>®</sup> / No. 373



Contact Littelfuse for individual I-t curves

# No. 374 / TR5®



## UL 248-14, 250 V, T lead free

### Time-Current Characteristic

Time Lag (T)

### Standard

UL 248-14  
CSA C22.2 No. 248.14

### Approvals

UL Listed  
CSA Certified

### Features

- Lead free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shocksafe casing
- Vibration resistant
- Hologen free

## Specifications

### Packaging

000: Tape/Ampopack (1,000 pcs.)  
041: Short Leads - Bulk (1,000 pcs.)

### Materials

Base/Cap: Brown Thermoplastic  
Polyamide PA 6.6, UL 94 V0  
Round Pins: Copper, Sn plated

### 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,-78)

### Stock Conditions:

+10 °C to +60 °C  
relative humidity ≤ 75 % yearly average,  
without dew, maximum value for 30 days-95 %

### Vibration Resistance

24 cycles at 15 min. each (EN 60068-2-6)  
10 - 60 Hz at 0.75mm amplitude  
60 - 2000 Hz at 10 g acceleration

### Lead Pull Strength

10 N (EN 60068-2-21)

### Solderability

260 °C, ≤ 3 s (Wave)  
350 °C, ≤ 3 s (Solder iron)

### Soldering Heat Resistance

260 °C, 10 s (IEC 60068-2-20)

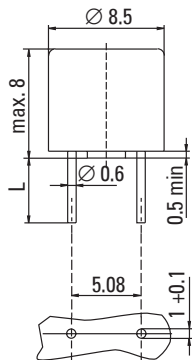
### Marking

Ⓢ, 374, 250 V, T, Current Rating, Approvals

### Unit Weight

0.77 g (approx.)

### Dimensions (mm)



Holes in PCB  
Long Leads (L=18.8mm)  
Short Leads (L=4.3mm)

### Limits for Pre-arcing Time

Rated Current	2.0 x I <sub>N</sub>
50 mA ... 10.00 A	< 60 s



### Permissible continuous operating current is ≤ 70 % at ambient temperature of 23 °C (73.4 °F).

Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I <sub>N</sub> Ⓢ max. (mV)	Power Dissipation 1.0 x I <sub>N</sub> Ⓢ max. (mW)	Melting Integral 10 x I <sub>N</sub> Ⓢ min. (A <sup>2</sup> s)	Approvals UL CSA cULus
50mA	0050	250V	50 A / 250 V AC 50-60 Hz cos φ = 1.0	900	45	0.0056	• •
63mA	0063	250V		800	50	0.009	• •
80mA	0080	250V		700	55	0.014	• •
100mA	0100	250V		600	60	0.025	• •
125mA	0125	250V		550	70	0.044	• •
160mA	0160	250V		480	80	0.058	• •
200mA	0200	250V		390	80	0.1	• •
250mA	0250	250V		350	90	0.17	• •
315mA	0315	250V		300	95	0.26	• •
400mA	0400	250V		250	100	0.32	• •
500mA	0500	250V		220	110	0.6	• •
630mA	0630	250V		210	135	0.75	• •
800mA	0800	250V		160	130	0.98	• •
1.00A	1100	250V		155	155	2.1	• •
1.25A	1125	250V		145	185	3.2	• •
1.60A	1160	250V		130	210	4.5	• •
2.00A	1200	250V		125	250	7.5	• •
2.50A	1250	250V		120	300	14	• •
3.15A	1315	250V		110	350	22	• •
4.00A	1400	250V		100	400	36	• •
5.00A	1500	250V	95	475	59	• •	
6.30A	1630	250V	90	570	110	• •	
8.00A <sup>1</sup>	1800	250V	80	1000	150	•	
10.00A <sup>1</sup>	2100	250V	90	1250	280	•	

<sup>1</sup> Conducting path cross-section minimum ≥ 0.2mm<sup>2</sup>

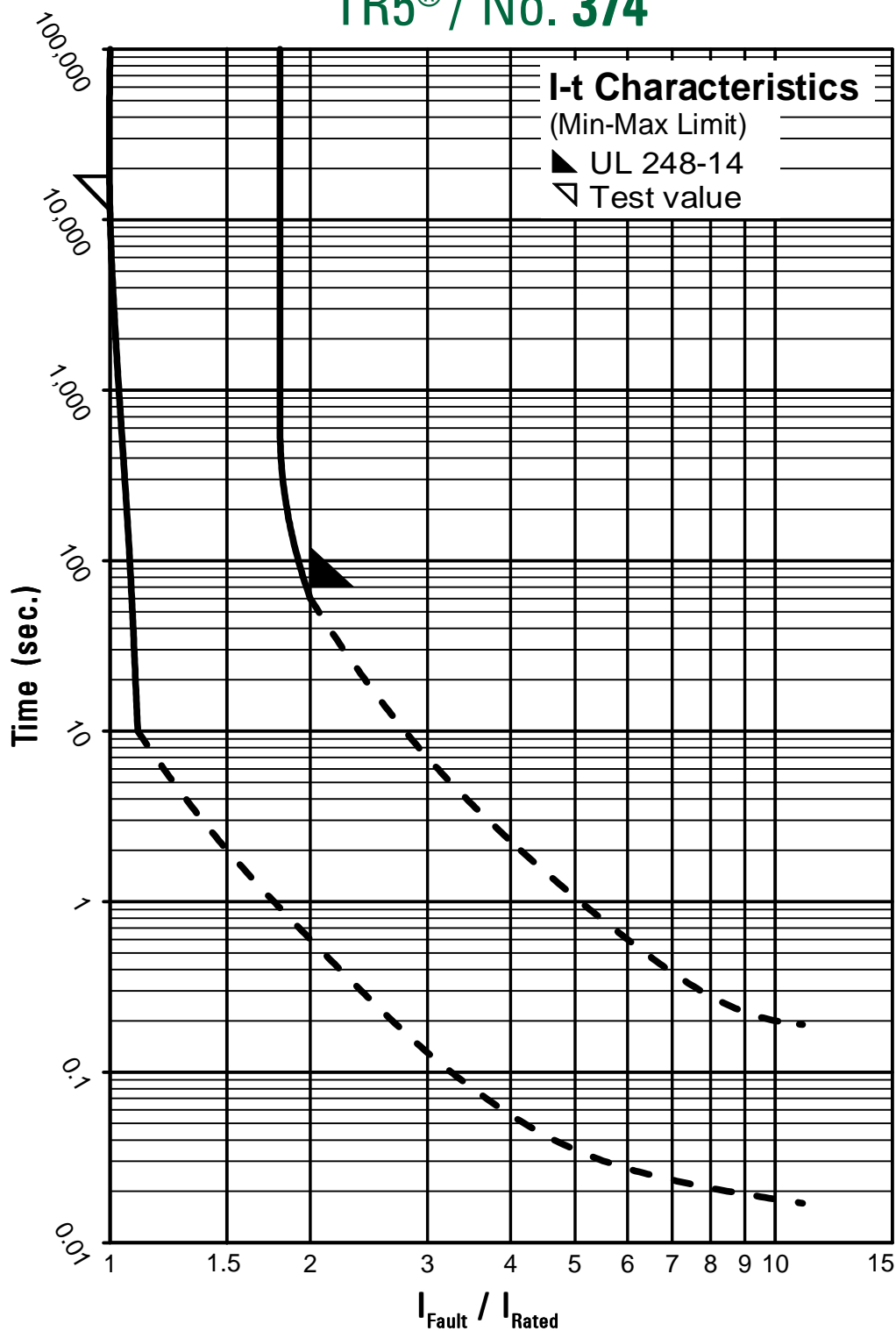
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

### Order Information

Qty.	Order-Number	Series	Amp Code	Packaging
		374		

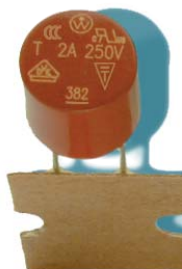
Specifications are subject to change without notice

## TR5<sup>®</sup> / No. 374

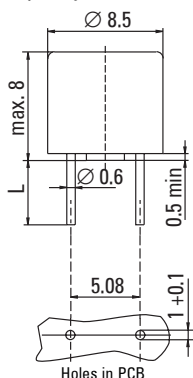


Contact Littelfuse for individual I-t curves

# No. 382 / TR5®



## Dimensions (mm)



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

## IEC 60127-3/IV, 250 V, T lead free

### Time-Current Characteristic

Time Lag (T)

### Standard

IEC 60127-3/IV

### Approvals

- VDE
- SEMKO
- cULus Recognized
- METI-T-Mark
- METI-PSE
- CCC

## Features

- Lead Free
- 320 V cULus recognized
- Electronic Ballast for Lamps
- 100A breaking capacity
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shocksafe casing
- Vibration resistant
- Halogen free

## Specifications

### Packaging

- 000: Tape/Ammopack (1,000 pcs.)
- 041: Short Leads - Bulk (1,000 pcs.)

### Materials

- Base/Cap: Brown Thermoplastic  
Polyamide PA 6.6, UL 94 V0
- Round Pins: Copper, Sn plated

### Operating Temperature

-40 °C to +85 °C (consider de-rating)

### Climatic Category

-40 °C/+85 °C/21 days  
(IEC 60068-1,-2-1,-2-2,-2-78)

### Stock Conditions

+10 °C to +60 °C  
relative humidity ≤ 75 % yearly average,  
without dew, maximum value for 30 days-95 %

### Vibration Resistance

24 cycles at 15 min. each (EN 60068-2-6)  
10 - 60 Hz at 0.75 mm amplitude  
60 - 2000 Hz at 10 g acceleration

### Lead Pull Strength

10N (IEC 60068-2-21)

### Solderability

260 °C, ≤ 3 s (Wave)  
350 °C, ≤ 3 s (Soldering Iron)

### Soldering Heat Resistance

260 °C, 10 s (IEC 60068-2-20)

### Marking

Ⓢ, 382, 250 V, T, Current Rating, Approvals

### Unit Weight

0.82 g (approx.)



### Limits for Pre-arcing Time

Rated Current	1.5 x I <sub>N</sub>	2.1 x I <sub>N</sub>	2.75 x I <sub>N</sub>	4 x I <sub>N</sub>	10 x I <sub>N</sub>
1.00 A ... 6.30 A	> 1 h	< 2 min	400 ms ... 10 s	150 ms ... 3 s	20 ms ... 150 ms
8.00 A ... 10.00 A	> 1 h	< 300 s	1 s ... 20 s	150 ms ... 3 s	20 ms ... 150 ms



### Permissible continuous operating current is ≤ 100 % at ambient temperature of 23 °C (73.4 °F).

Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I <sub>N</sub> Ⓢ max. (mV)	Power Dissipation 1.5 x I <sub>N</sub> Ⓢ max. (mW)	Melting Integral 10 x I <sub>N</sub> Ⓢ min. (A²s)	Approvals				
							VDE	SEMKO	cULus	METI-T-Mark	METI-PSE
1.00 A	1100	250 V	100A / 250 V AC <sup>1</sup> 50-60 Hz cos φ=1.0	100	400	3.0	•	•	•	•	•
1.25 A	1125	250 V		95	465	4.5	•	•	•	•	•
1.60 A	1160	250 V		90	490	9.0	•	•	•	•	•
2.00 A	1200	250 V		85	670	12	•	•	•	•	•
2.50 A	1250	250 V		80	750	22	•	•	•	•	•
3.15 A	1315	250 V		75	900	32	•	•	•	•	•
4.00 A	1400	250 V		70	1200	58	•	•	•	•	•
5.00 A	1500	250 V		65	1250	90	G	•	•	•	•
6.30 A*	1630	250 V		65	1400	105	G	•	•	•	•
8.00 A**	1800	250 V		63	1600	180		•	•	•	•
10.00A**	2100	250 V	57	1600	260		•	•	•	•	

<sup>1</sup> Breaking capacity at UR: 50A at 320V

\* Conducting path min. 0.2 mm<sup>2</sup>

G Expert Report

\*\*Conducting path min. 0.35 mm<sup>2</sup>

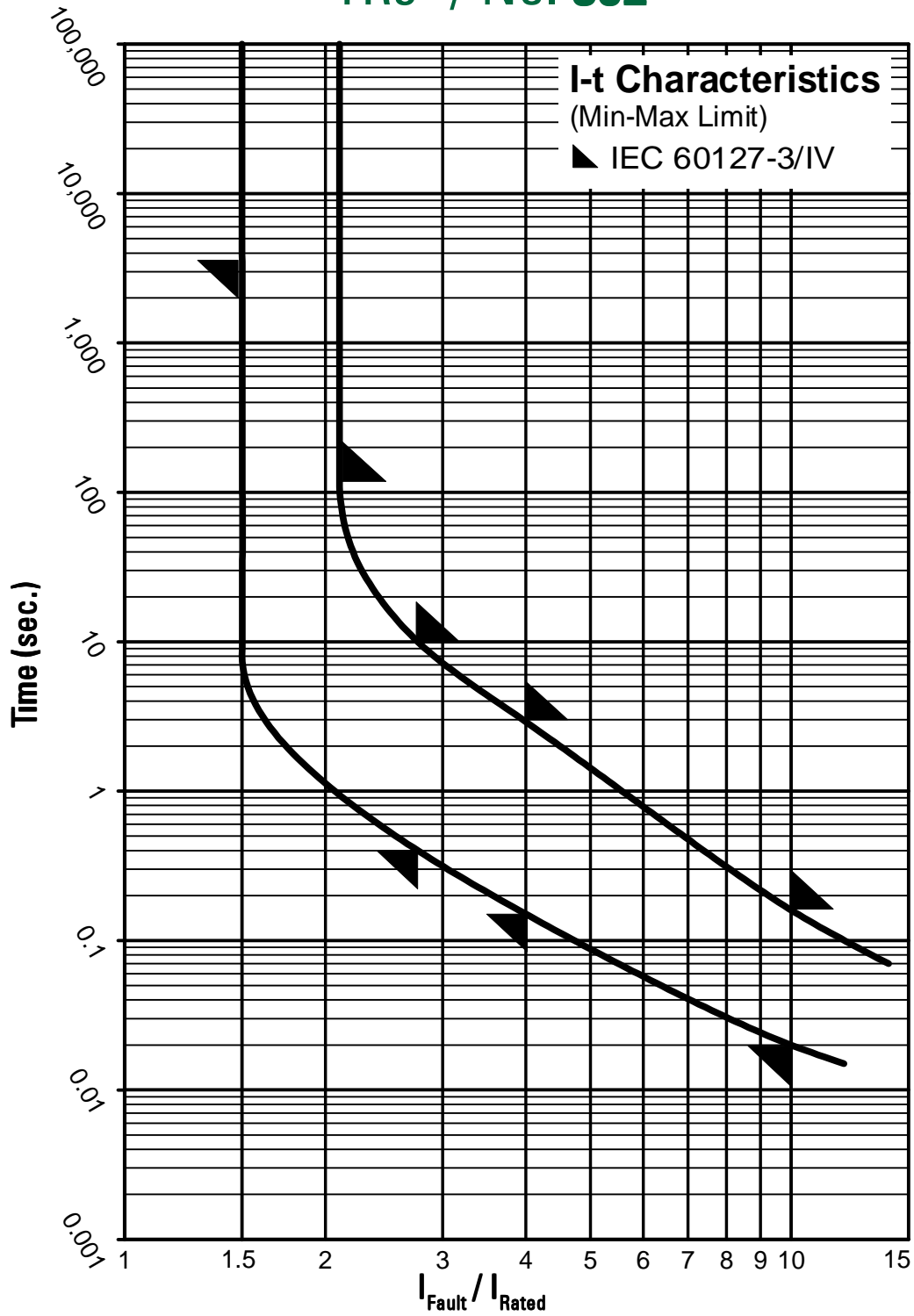
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

## Order Information

Qty.	Order-Number	Series	Amp Code	Packaging
		382		

Specifications are subject to change without notice

## TR5<sup>®</sup> / No. 382



Contact Littelfuse for individual I-t curves

# No. 392 / TE5®



## IEC 60127-3/IV, 250 V, T Lead Free

### Time-Current Characteristic

Time Lag (T)

### Standard

According to IEC 60127-3/IV

### Approvals

- VDE Expert Report
- SEMKO
- cULus Recognized
- METI-PSE
- CCC

### Features

- Lead Free
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shocksafe casing
- Vibration resistant
- Halogen free

## Specifications

### Packaging

- 000: Tape/Ammopack (1,400 pcs.)
- 044: Short Leads - Bulk (1,400 pcs.)

### Materials

- Base/Cap: Brown Thermoplastic  
Polyamide PA 6.6, UL 94 V0
- Round Pins: Copper, Sn plated

### 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,-78)

### Stock Conditions

+10 °C to +60 °C  
relative humidity ≤ 75 % yearly average,  
without dew, maximum value for 30 days - 95 %

### Vibration Resistance

24 cycles at 15 min. each (EN 60068-2-6)  
10 - 60 Hz at 0.75 mm amplitude  
60 - 2000 Hz at 10 g acceleration

### Lead Pull Strength

10 N (IEC 60068-2-21)

### Solderability

260 °C, ≤ 3 s (Wave)  
350 °C, ≤ 1 s (Soldering iron)

### Soldering Heat Resistance

260 °C, 10 s (IEC 60068-2-20)  
350 °C, ≤ 3 s (Soldering iron)

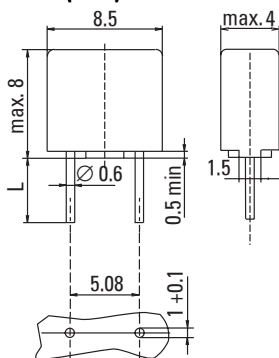
### Marking

Ⓢ, T, Current Rating, Approvals

### Unit Weight

0.60 g (approx.)

### Dimensions (mm)



Holes in PCB

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



Limits for Pre-arcing Time					
Rated Current	1.5 x I <sub>N</sub>	2.1 x I <sub>N</sub>	2.75 x I <sub>N</sub>	4 x I <sub>N</sub>	10 x I <sub>N</sub>
800 mA ... 6.30 A	> 1 h	< 2 min	400 ms ... 10 s	150 ms ... 3 s	20 ms ... 150 ms



Permissible continuous operating current is ≤ 100 % at ambient temperature of 23 °C (73.4 °F).												
Rated Current	Amp Code	Voltage Rating	Breaking Capacity 50-60Hz/cos φ=1.0	Voltage Drop 1.0 x I <sub>N</sub> Ⓢ max. (mV)	Power Dissipation 1.5 x I <sub>N</sub> Ⓢ max. (mW)	Melting Integral 10 x I <sub>N</sub> Ⓢ min. (A <sup>2</sup> s)	Approvals					
							VDE	SEMKO	cULus	METI-PSE	CCC	K-Mark
800 mA	0800	250V	25A/250 V AC	110	280	3.80	G	•	•	•	•	p
1.00 A	1100	250V	25A/250 V AC	115	400	5.80	G	•	•	•	•	p
1.25 A	1125	250V	25A/250 V AC	100	500	9.75	G	•	•	•	•	p
1.60 A	1160	250V	25A/250 V AC	95	600	13.50	G	•	•	•	•	p
2.00 A	1200	250V	25A/250 V AC	90	700	21.00	G	•	•	•	•	p
2.50 A	1250	250V	25A/250 V AC	85	750	32.00	G	•	•	•	•	p
3.15 A	1315	250V	32A/250 V AC	80	1100	55.00	G	•	•	•	•	p
4.00 A	1400	250V	40A/250 V AC	75	1200	100.00	G	•	•	•	•	p
5.00 A	1500	250V	50A/250 V AC	70	1000	90.00	p	p	•	p	p	p
6.30 A	1630	250V	63A/250 V AC	65	1200	126.00	G	p	•	p	p	p

Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

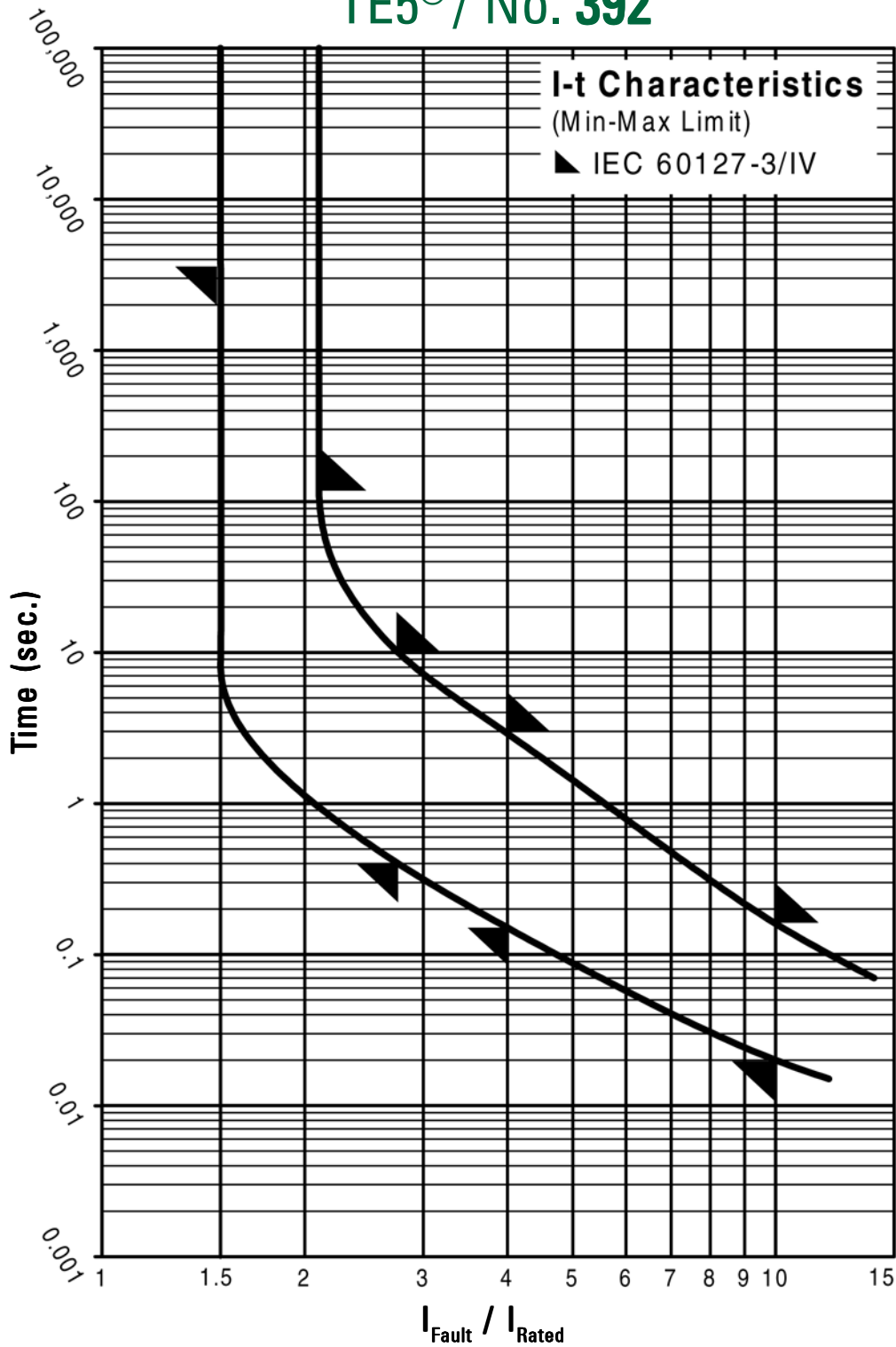
G = Expert Report  
p = pending

### Order Information

Qty.	Order-Number	Series	Amp Code	Packaging
		392		

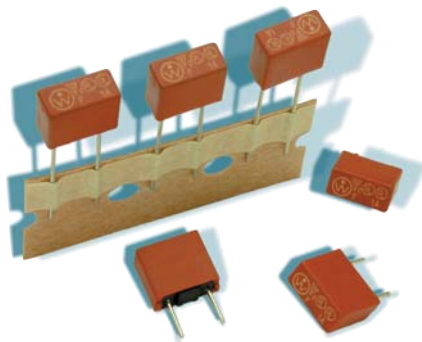
Specifications are subject to change without notice

## TE5<sup>®</sup> / No. 392

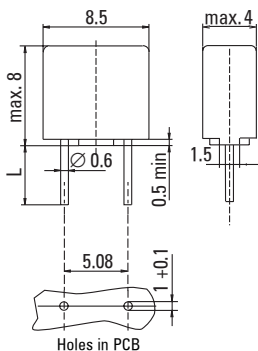


Contact Littelfuse for individual I-t curves

## No. 395 / TE5®



### Dimensions (mm)



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

## UL 248-14, 125 V, F

### Time-Current Characteristic

Quick Acting (F)

### Standard

UL 248-14  
CSA C22.2 No. 248.14

### Approvals

UL Listed  
cUL Listed  
METI-PSE

### Features

Reduced PCB space requirements  
Direct solderable or plug-in versions  
Internationally approved  
Low internal resistance  
Shocksafe casing  
Vibration resistant  
Halogen free

## Specifications

### Packaging

000: Tape/Amp-pack (1,400 pcs.)  
044: Short Leads - Bulk (1,400 pcs.)

### Materials

Base/Cap: Brown Thermoplastic  
Polyamide PA 6.6, UL 94V0  
Round Pins: Copper, Sn plated

### 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  
relative humidity ≤ 75 % yearly average,  
without dew, maximum value for 30 days - 95 %

### Vibration Resistance

24 cycles at 15 min. each (EN 60068-2-6)  
10 - 60 Hz at 0.75 mm amplitude  
60 - 2000 Hz at 10 g acceleration

### Lead Pull Strength

10 N (IEC 60068-2-21)

### Solderability

260 °C, ≤ 3 s (Wave)  
350 °C, ≤ 3 s (Soldering iron)

### Soldering Heat Resistance

260 °C, 10 s (IEC 60068-2-20)

### Marking

Ⓢ, F, Current Rating, Approvals

### Unit Weight

0.60 g (approx.)

### Limits for Pre-arcing Time

Rated Current	2.0 x I <sub>N</sub>	2.0 x I <sub>N</sub> Ⓢ
50 mA ... 6.30 A	< 60 s	< 5 s



Permissible continuous operating current is ≤ 70 % at ambient temperature of 23 °C (73.4 °F).

Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I <sub>N</sub> Ⓢ max. (mV)	Power Dissipation 1.0 x I <sub>N</sub> Ⓢ max. (mW)	Melting Integral 10 x I <sub>N</sub> Ⓢ max. (A <sup>2</sup> s)	Approvals		
							UL	cUL	METI-PSE
50mA	0050	125V		1600	85	0.0001	•	•	•
63mA	0063	125V		1300	85	0.00013	•	•	•
80mA	0080	125V		1200	100	0.0002	•	•	•
100mA	0100	125V		1100	110	0.0013	•	•	•
125mA	0125	125V		1350	160	0.0019	•	•	•
160mA	0160	125V		1000	150	0.0037	•	•	•
200mA	0200	125V		950	210	0.0075	•	•	•
250mA	0250	125V		900	225	0.013	•	•	•
315mA	0315	125V		800	255	0.026	•	•	•
400mA	0400	125V	100A/125VAC	230	95	0.015	•	•	•
500mA	0500	125V	50-60Hz	220	110	0.025	•	•	•
630mA	0630	125V	cos φ=1.0	210	135	0.045	•	•	•
800mA	0800	125V		200	160	0.068	•	•	•
1.00A	1100	125V		190	190	0.13	•	•	•
1.25A	1125	125V		180	225	0.2	•	•	•
1.60A	1160	125V		170	275	0.39	•	•	•
2.00A	1200	125V		160	450	0.53	•	•	•
2.50A	1250	125V		150	375	1.1	•	•	•
3.15A	1315	125V		140	445	1.9	•	•	•
4.00A	1400	125V		130	520	3.2	•	•	•
5.00A	1500	125V		120	600	6.1	•	•	•
6.30A	1630	125V		115	850	9.7	•	•	•

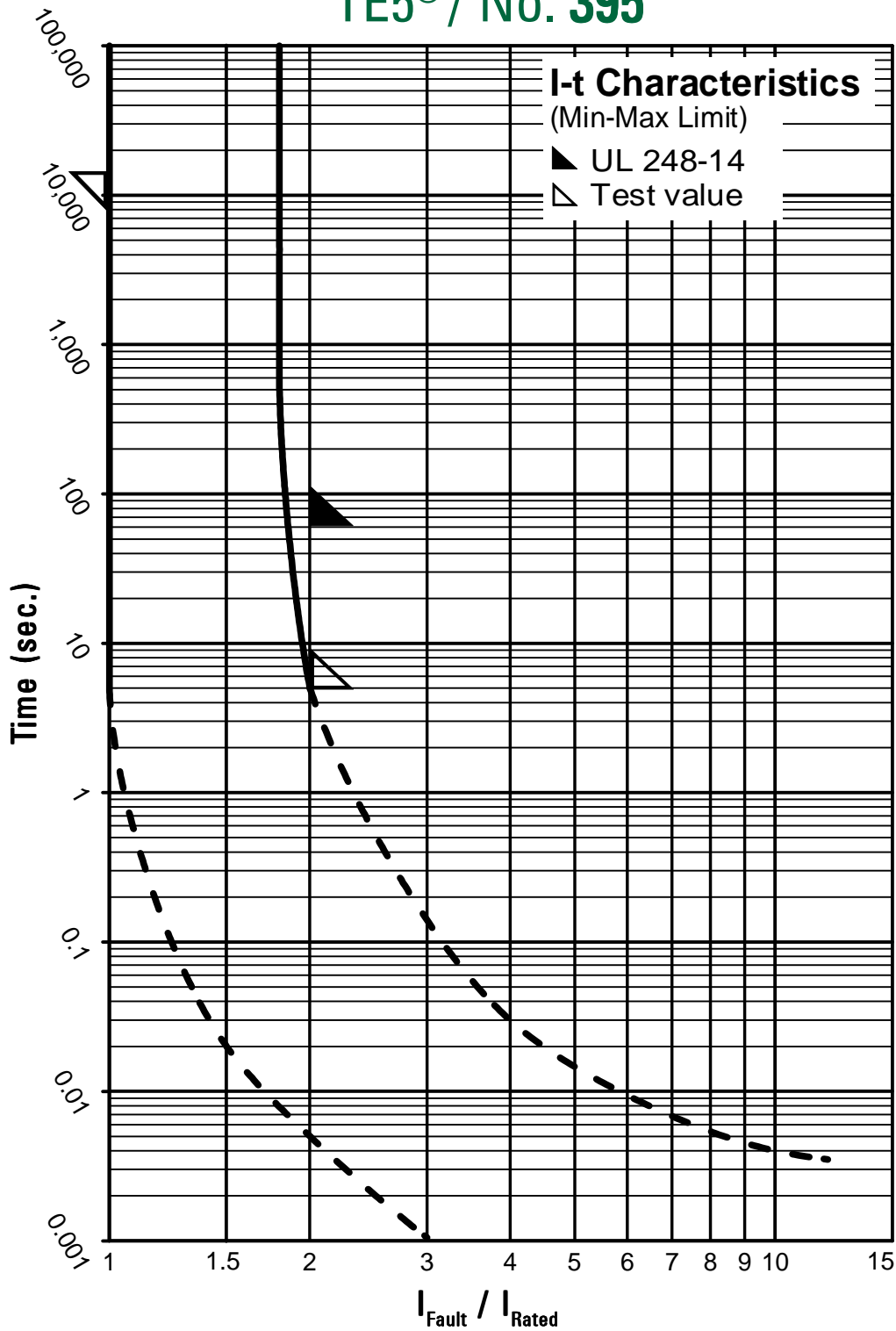
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

### Order Information

Qty.	Order-Number	Series	Amp Code	Packaging
		395		

Specifications are subject to change without notice

## TE5<sup>®</sup> / No. 395

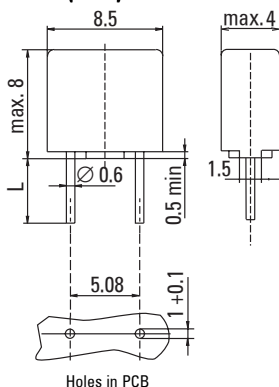


Contact Littelfuse for individual I-t curves

## No. 396 / TE5®



### Dimensions (mm)



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

## UL 248-14, 125 V, T Leadfree

### Time-Current Characteristic Time Lag (T)

**Standard**  
UL 248-14  
CSA C22.2 No. 248.14

### Approvals

UL Listed  
cUL Listed  
METI-PSE

## Features

- Leadfree
- Reduced PCB space requirements
- Direct solderable or plug-in versions
- Internationally approved
- Low internal resistance
- Shocksafe casing
- Vibration resistant
- halogen free

## Specifications

### Packaging

000: Tape/Ammopack (1,400 pcs.)  
044: Short Leads - Bulk (1,400 pcs.)

### Materials

Base/Cap: Brown Thermoplastic  
Polyamide PA 6.6, UL 94V0  
Round Pins: Copper, Sn plated

### 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,-78)

### Stock Conditions

+10 °C to +60 °C  
relative humidity ≤ 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

### Lead Pull Strength

10 N (IEC 60068-2-21)

### Solderability

260 °C, ≤ 3 s (Wave)  
350 °C, ≤ 3 s (Soldering Iron)

### Soldering Heat Resistance

260 °C, 10 s (IEC 60068-2-20)

### Marking

Ⓢ, T, Current Rating, Approvals

### Unit Weight

0.60 g (approx.)

### Limits for Pre-arcing Time

Rated Current	2.0 x I <sub>N</sub>
50 mA ... 6.30 A	< 60 s



Permissible continuous operating current is ≤ 70 % at ambient temperature of 23 °C (73.4 °F).

Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I <sub>N</sub> Ⓢ max. (mV)	Power Dissipation 1.0 x I <sub>N</sub> Ⓢ max. (mW)	Melting Integral 10 x I <sub>N</sub> Ⓢ min. (A²s)	Approvals		
							UL	cUL	METI-PSE
50mA	0050	125V		900	45	0.0056	•	•	
63mA	0063	125V		800	50	0.009	•	•	
80mA	0080	125V		700	55	0.014	•	•	
100mA	0100	125V		600	60	0.025	•	•	
125mA	0125	125V		550	70	0.044	•	•	
160mA	0160	125V		480	80	0.058	•	•	
200mA	0200	125V		390	80	0.1	•	•	
250mA	0250	125V		350	90	0.17	•	•	
315mA	0315	125V		300	95	0.26	•	•	
400mA	0400	125V	100A / 125 V AC	250	100	0.32	•	•	
500mA	0500	125V	50-60 Hz	220	110	0.58	•	•	
630mA	0630	125V	cos φ = 1.0	210	135	0.75	•	•	
800mA	0800	125V		160	130	0.98	•	•	
1.00A	1100	125V		155	155	2.2	•	•	•
1.25A	1125	125V		145	185	3.8	•	•	•
1.60A	1160	125V		130	210	5.2	•	•	•
2.00A <sup>1</sup>	1200	125V		125	250	7.5	•	•	•
2.50A <sup>1</sup>	1250	125V		120	300	14	•	•	•
3.15A <sup>1</sup>	1315	125V		110	350	22	•	•	•
4.00A	1400	125V		110	400	27	•	•	•
5.00A	1500	125V		95	475	59	•	•	•
6.30A	1630	125V		95	570	100	•	•	

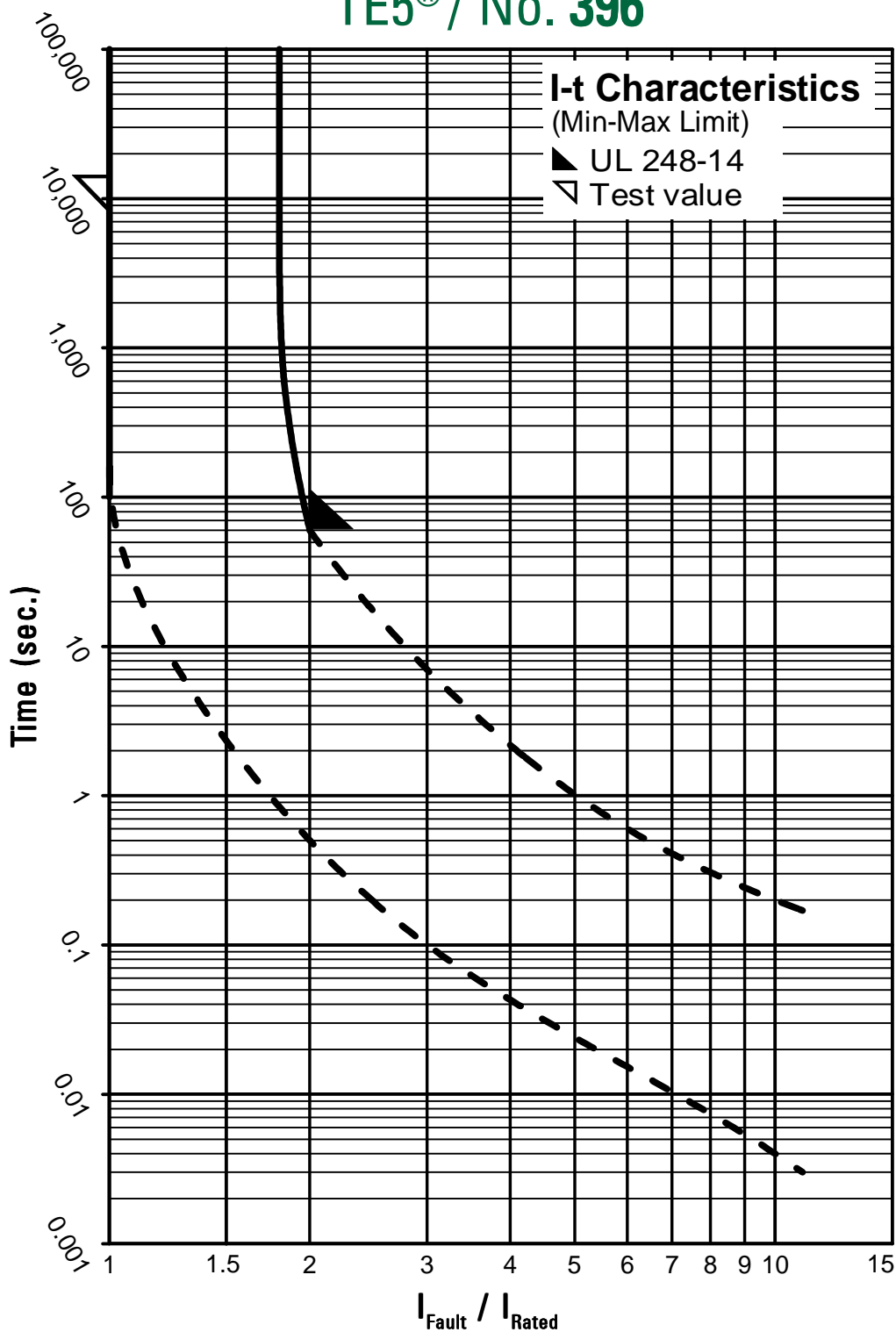
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

### Order Information

Qty.	Order-Number	Series	Amp Code	Packaging
		396		

Specifications are subject to change without notice

## TE5<sup>®</sup> / No. 396

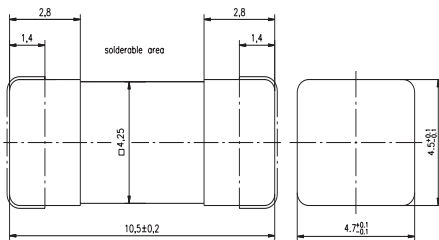


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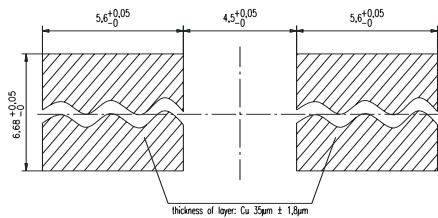
## SM250V / SM350V No. 462 Lead Free



### Dimensions (mm)



### Pad Layout acc. to IEC 60127-4



## IEC 60127-4, 250 V / 350 V AC/DC, T

### Time-Current Characteristic

Time Lag (T)

### Standard

IEC 60127-4/2  
UL 248-14

### Approvals

VDE  
UL  
PSE JET

## Features

- Heat resistant plastic housing, UL 94 V-0
- For line or low voltage applications
- Low voltage drop
- Internationally approved
- High pulse resistance
- Lead-free

## Specifications

### Packaging

DR: Blister Tape (1500 pcs.) reel diameter 330 mm

### Materials

Housing: plastic UL 94 V-0  
Element: Wire  
Terminals: copper alloy, tin plated

### Operating Temperature

-40 °C to +85 °C (consider derating)

### Climatic Category

-40 °C / +85 °C / 21 days  
(IEC 60068-1, -2-1, -2-2, -2-78)

### Stock Conditions

+10 °C to +60 °C  
relative humidity ≤ 75 % yearly average,  
without dew, maximum value for 30 days-95 %

### Vibration Resistance

24 cycles of 15 min. each (EN 60068-2-6)  
10 - 60 Hz at 0.75 mm amplitude  
60 - 2000 Hz at 10 g acceleration

### Solderability

235 °C, 5 s. (IEC 60068-2-58)

### Soldering Heat Resistance

260 °C, 10 s. (IEC 60068-2-58)

### Minimum Cross Section, Copper

Conducting path - 0.1 mm<sup>2</sup>  
Thickness - 0.035 mm

### Mounting

Avoid circuit traces below the fuse

### Marking

Ⓜ, T, Current Rating, L, 250V, Ⓜ

### Unit Weight

0.4 g



### Limits for Pre-arcing Time

Rated Current	1.25 x I <sub>N</sub>	2.0 x I <sub>N</sub>	10 x I <sub>N</sub>
500mA...5.00 A	> 1 h	< 2 min	10 ms ... 100 ms

### Permissible continuous operating current is ≤ 80 % at ambient temperature of 23 °C (73.4 °F).

Rated Current	Voltage Rating	Breaking Capacity Ⓜ	Voltage Drop 1.0 x I <sub>N</sub> Ⓜ max. (mV)	Power Dissipation 1.25 x I <sub>N</sub> Ⓜ max. (mW)	Melting Integral 10 x I <sub>N</sub> Ⓜ min. (A <sup>2</sup> s) typ.		Approvals			
					VDE	UL	PSE/JET	cURus		
500 mA	250 V		160	200	0.33	0.43	•	•	•	
630 mA	250 V		160	200	0.60	0.80	•	•	•	
800 mA	250 V		160	250	1.05	1.40	•	•	•	
1.00 A	250 V		140	250	2.00	2.70	•	•	•	•
1.25 A	250 V	100 A / 350 V AC/DC *	130	250	4.00	5.20	•	•	•	•
1.60 A	250 V	150 A / 250 V AC/DC 50-60Hz cos φ = 1.0	130	280	7.00	9.70	•	•	•	•
2.00 A	250 V		120	300	4.00	5.44	•	•	•	•
2.50 A	250 V		120	450	6.25	8.00	•	•	•	•
3.15 A	250 V		110	600	11.00	14.00	•	•	•	•
4.00 A	250 V		110	800	17.60	21.00	•	•	•	•
5.00 A	250 V	150 A / 250 V AC/DC	110	1000	30.00	40.00	•	•	•	•

\* 100 A / 350 V AC/DC according to UL Recognition

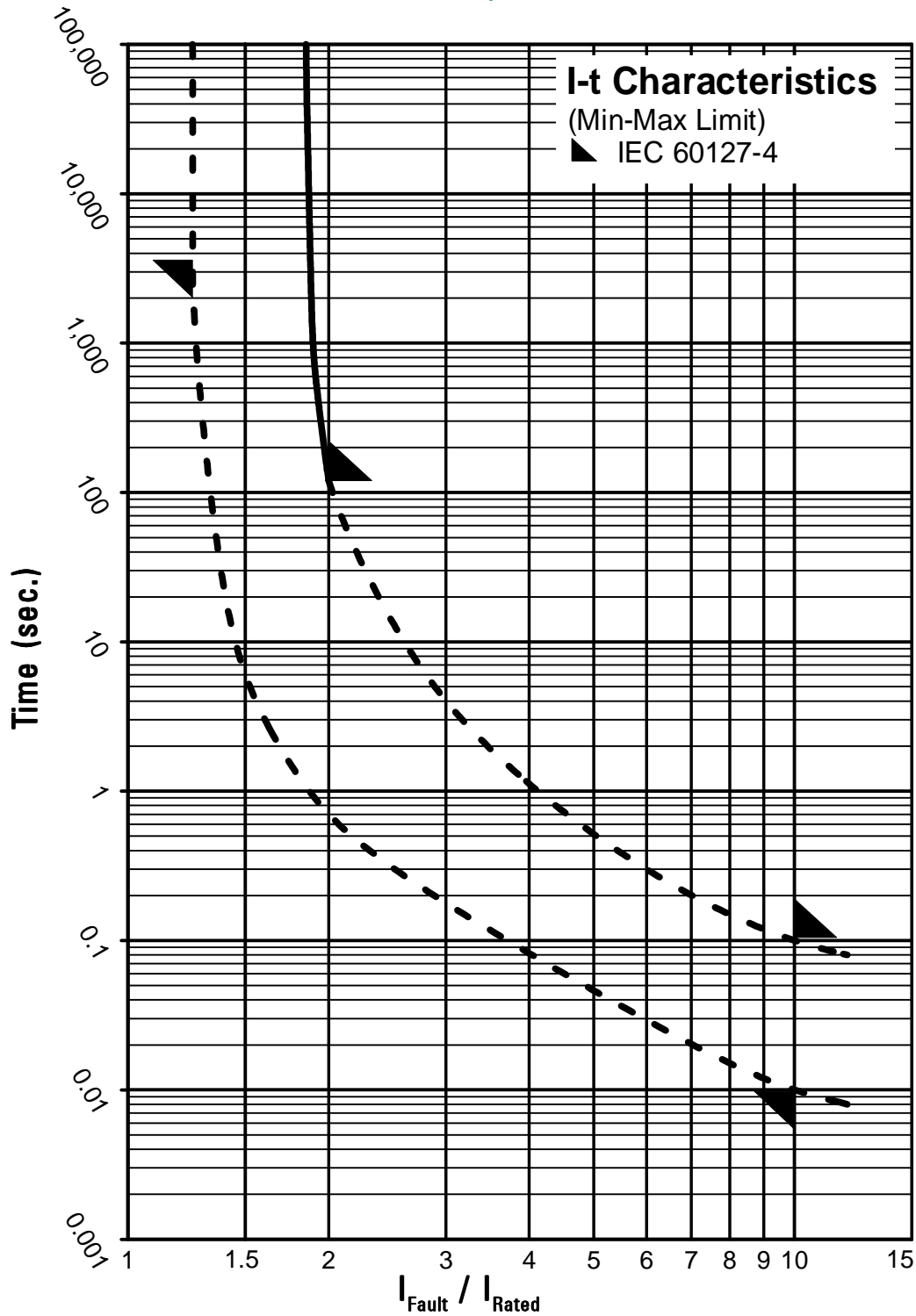
Note: 1.00 means the number one with two decimal places. 1,000 means the number one thousand.

### Order Information

Qty.	Order-Number	Series	Amp Rating	Packaging
		462		

Specifications are subject to change without notice

### SM250V / No. 462



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