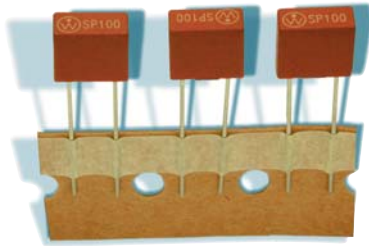
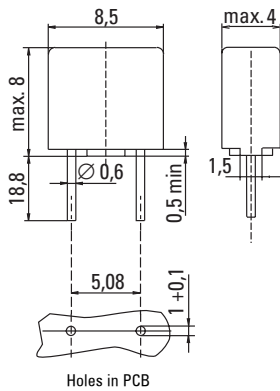


# No. 391 / SP



## Dimensions (mm)



## Short Circuit Protector, 65 V Specifications

### leadfree

For Short Circuit Protection of Sensitive Electronic Components and Assemblies

### Time-Current Characteristic

Quick Acting (F)

### Approvals

cULus Recognized

### Operating Criteria

Maximum continuous current:

$$I_C \geq I_{\text{operating max}} \times F_T \text{ quick acting}$$

Maximum melting integral:

$$I^2 t_{SP} < I^2 t_{\text{semiconductor (warm)}}$$

Minimum fault current:

$$I_{\text{Fault}} \geq 3 \times I_C$$

Maximum fault current:

$$I_{\text{Fault}} \leq 50A \text{ at } 65VAC/DC$$

### Features

- For worldwide applications
- Reduced PCB space requirements
- Highly defined cut-off times
- Irreversible physical separation
- Low internal resistance
- Flame resistant encapsulated casing

### Packaging

000: Tape/Ammopack (1400 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 60068-6)  
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

Ⓢ, Type

### Unit Weight

0.60 g (approx.)



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

Continous Current $I_C$	Type	Amp Code	Voltage Rating	Fault Current max.	Cold Resistance $0.1 \times I_C$ typ. (mΩ)	Power Dissipation $1.0 \times I_C$ max. (mW)	Melting Integral $10 \times I_C$ typ. (A <sup>2</sup> s)	Approvals cULus
125 mA	SP 13	0125	65 V		3400	190	0.005	•
160 mA	SP 16	0160	65 V		2450	210	0.0095	•
200 mA	SP 20	0200	65 V		1750	240	0.019	•
250 mA	SP 25	0250	65 V		195	52	0.012	•
315 mA	SP 32	0315	65 V		155	65	0.018	•
400 mA	SP 40	0400	65 V		120	85	0.034	•
500 mA	SP 50	0500	65 V	50A/65 VAC/DC	95	105	0.057	•
630 mA	SP 63	0630	65 V	50-60Hz	75	135	0.095	•
800 mA	SP 80	0800	65 V	cos φ=1.0	58	170	0.16	•
1.00 A	SP100	1100	65 V		46	220	0.27	•
1.25 A	SP125	1125	65 V		37	270	0.45	•
1.60 A	SP160	1160	65 V		29	350	0.77	•
2.00 A	SP200	1200	65 V		23	440	0.85	•
2.50 A	SP250	1250	65 V		18	550	2.2	•
3.15 A	SP315	1315	65 V		14	700	3.7	•
4.00 A	SP400	1400	65 V		12	900	6.5	•

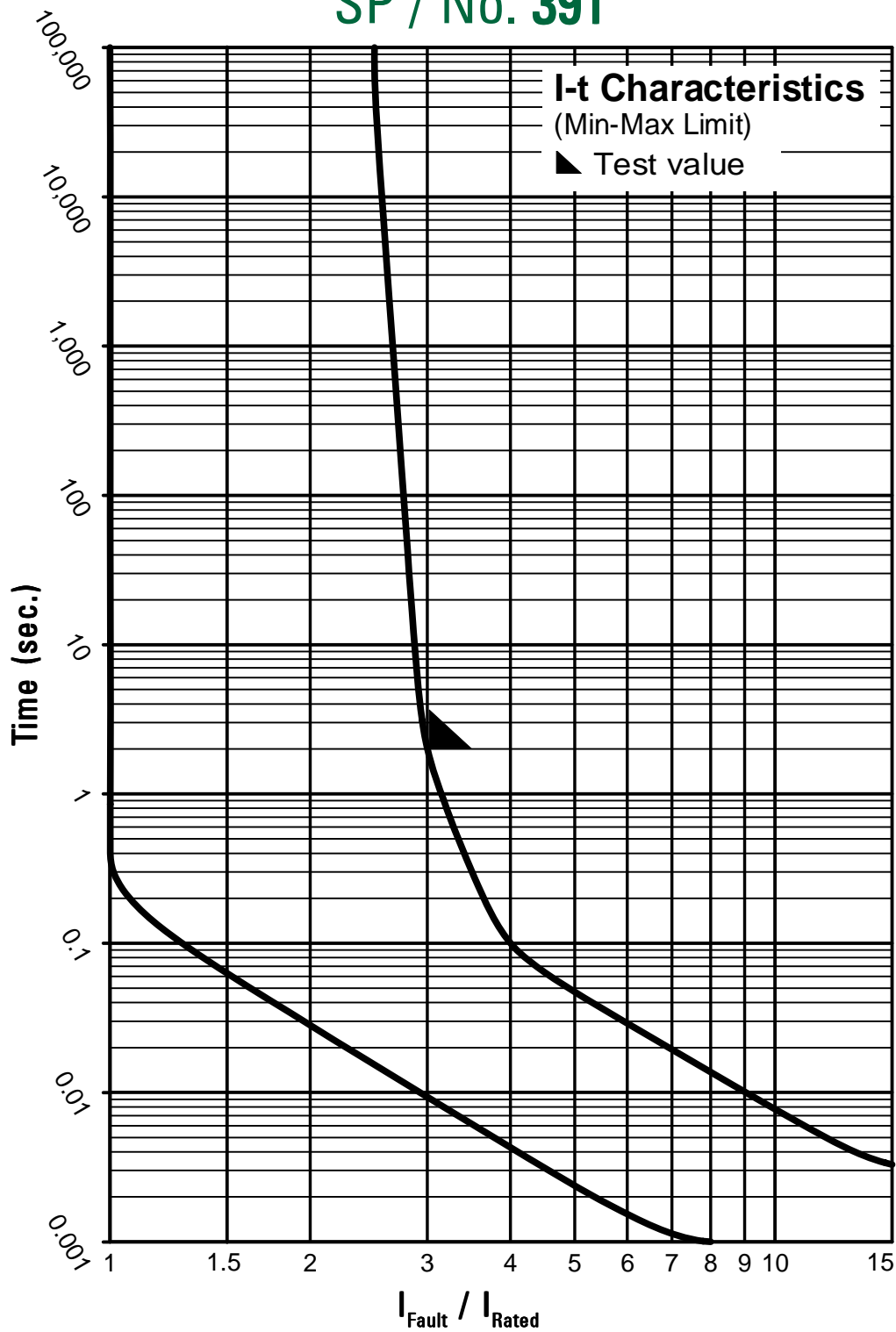
Note: 1.00 means the number one with two decimal places, 1,000 means the number one thousand.

## Order Information

Qty.	Order-Number	Series	Amp Code	Packaging
		391		

Specifications are subject to change without notice

## SP / No. 391



Contact Littelfuse for individual I-t curves