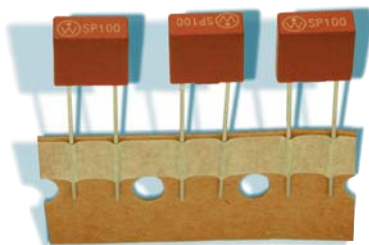
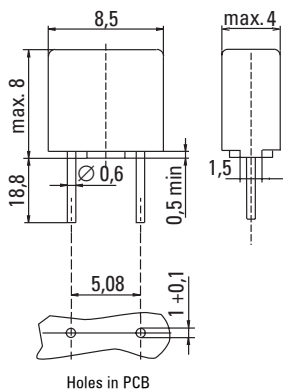


No. 391 / SP



Dimensions (mm)



Short Circuit Protector, 65 V 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:
 $I_C \geq I_{operating} \max \times F_T$ quick acting

Maximum melting integral:
 $I^2t_{SP} < I^2t_{semiconductor}$ (warm)

Minimum fault current:
 $I_{Fault} \geq 3 \times I_C$

Maximum fault current:
 $I_{Fault} \leq 50A$ 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 $\leq 75\%$ 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 $\leq 100\%$ 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 ² 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/65VAC/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 | cosφ=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 | • |

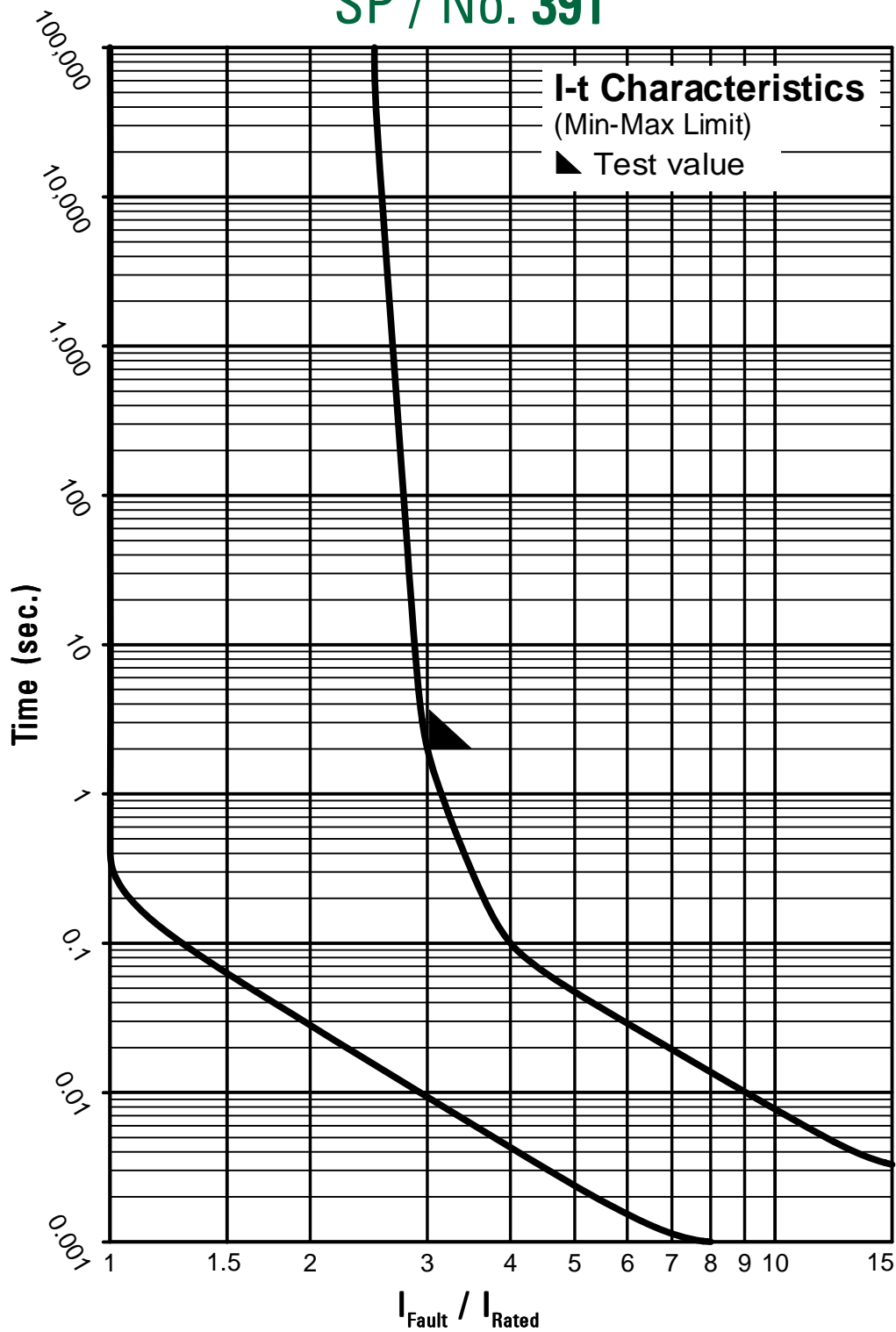
Note: 1.00 means the number one with two decimal places, 1,000 means the number one thousand.

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