# SURFACE-MOUNT FUSES
## High-Current-Rated Chip Fuses

Littelfuse®
Expertise Applied | Answers Delivered

The monolithic multilayer design of the Littelfuse high-current-rated chip fuses helps to provide some of the highest current ratings available in the 1206 size and enhances high-temperature performance in a wide range of circuit protection designs. The devices' small size, high reliability and strong arc suppression characteristics make them suitable for overcurrent protection of power supplies, servers, communications equipment, voltage regulator modules, and other high current, small size applications.

### BENEFITS

- Glass ceramic monolithic structure provides stability in application cycling
- High-current rating in a small package allows more efficient use in system space
- Strong arc suppression in overcurrent conditions

### FEATURES

- Lead-free materials and RoHS compliant
- Halogen free
  (refers to: Br≤900ppm, Cl≤900ppm, Br+Cl≤1500ppm)
- Monolithic multilayer design
- High-temperature performance
- -55°C to +150°C operating temperature range

### APPLICATIONS

- Communications equipment
- Voltage regulator modules
- Power supplies
- Servers

## Table FH1 — Clear Time Characteristics

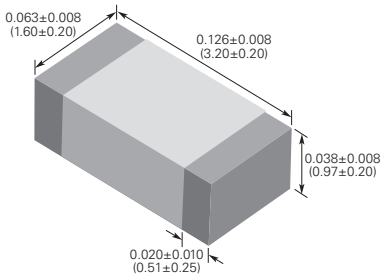
**1206SFH Series**

| % of Rated Current | Clear Time at 25°C |
|---|---|
| 100% | 4 hrs (min) |
| 250% (10-20A) | 5 s (max) |
| 350% (25-30A) | 5 s (max) |

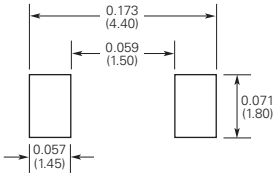
## Table FH2 — Typical Electrical Characteristics, Dimensions and Recommended Pad Layout

**1206 (3216mm) High-Current-Rated Chip Fuses**

**Shape and Dimensions**
in (mm)




**Recommended Pad Layout**
in (mm)




| Part Number | Typical Electrical Characteristics: Rated Current (A) | Nominal Cold DCR (Ω)* | Nominal I²t (A²sec)† | Max Interrupt Ratings: Voltage ($V_{DC}$) | Current (A) |
|---|---|---|---|---|---|
| 1206SFH100F/24 | 10 | 0.010 | 9 | 24 | 100 |
| 1206SFH120F/24 | 12 | 0.008 | 14 | 24 | 100 |
| 1206SFH150F/24 | 15 | 0.005 | 26 | 24 | 100 |
| 1206SFH200F/24 | 20 | 0.003 | 56 | 24 | 100 |
| 1206SFH250F/24 | 25 | 0.0016 | 187 | 24 | 250 |
| 1206SFH300F/24 | 30 | 0.0012 | 270 | 24 | 300 |

* Measured at ≤10% of rated current and 25°C ambient temperature.
† Melting I²t at 0.001 sec clear time.

## Figures FH1-FH2 — Family Performance Curves

**Figure FH1**

**1206SFH Average Time Current Curves**

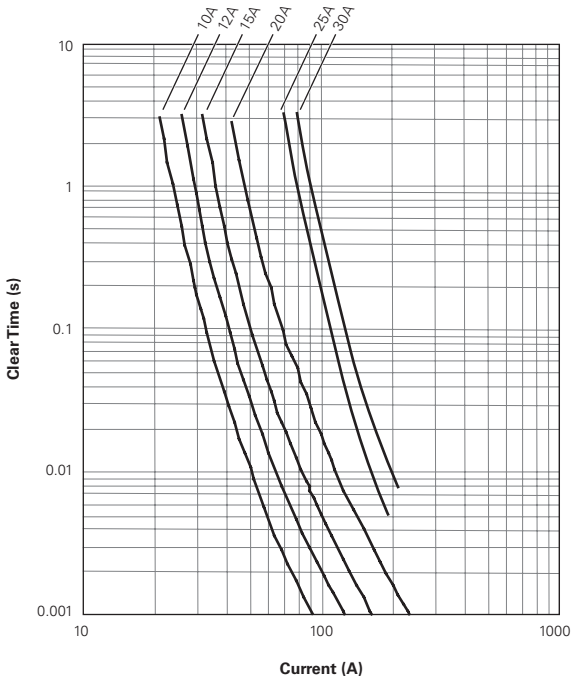
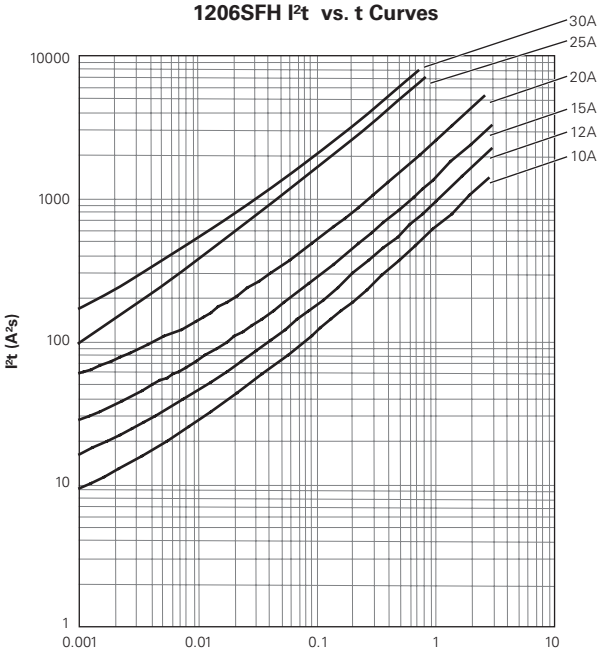



**Figure FH2**

**1206SFH I²t vs. t Curves**




**Note:** Curves are nominal.



HF Halogen Free
RoHS Compliant, ELV Compliant

## Notice:

Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.