

# SURFACE-MOUNT FUSES

## Pulse Tolerant Chip Fuses

Pulse Tolerant Chip Fuses have high inrush current withstand capability and provide overcurrent protection for DC power systems. These devices combine a silver fusing element and monolithic, multilayer design to provide strong arc suppression characteristics.

These RoHS-compliant surface-mount devices can help facilitate the development of more reliable, high-performance consumer electronics such as laptops, multimedia devices, cell phones and other portable electronics.



### BENEFITS

- High inrush current withstanding capability
- Ceramic monolithic structure
- Silver fusing element and silver termination with nickel and tin plating
- Temperature stability
- Strong arc suppression characteristics

### 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 +125°C operating temperature range

### APPLICATIONS

- Laptops
- Digital cameras
- Cell phones
- Printers
- DVD players
- Portable electronics
- Game systems
- LCD monitors
- Scanners

# Surface Mount Fuses

## Pulse Tolerant Chip Fuses

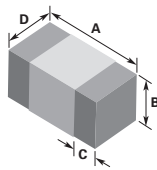
### Table FP1 – ClearTime Characteristics

| % of Rated Current |  | Clear Time at 25°C |              |
|--------------------|--|--------------------|--------------|
| 100%               |  | 4 hrs (min)        | —            |
| 200%               |  | 1 s (min)          | 60 s (max)   |
| 1000%              |  | 0.0002 s (min)     | 0.02 s (max) |

### Table FP2 – Typical Electrical Characteristics and Dimensions

#### 0603 (1608 mm) Pulse Tolerant Chip Fuses

Shape and Dimensions  
mm (in)

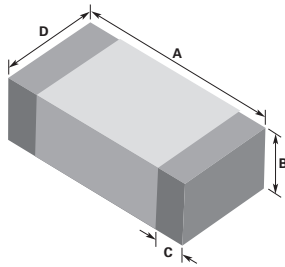


|    | A       |         | B       |         | C       |         | D       |         |
|----|---------|---------|---------|---------|---------|---------|---------|---------|
|    | Min     | Max     | Min     | Max     | Min     | Max     | Min     | Max     |
| mm | 1.45    | 1.75    | 0.65    | 0.95    | 0.21    | 0.51    | 0.65    | 0.95    |
| in | (0.057) | (0.069) | (0.026) | (0.037) | (0.008) | (0.020) | (0.026) | (0.037) |

| Part Number      | Typical Electrical Characteristics |                       |  | Max Interrupt Ratings      |             |
|------------------|------------------------------------|-----------------------|--|----------------------------|-------------|
|                  | Rated Current (A)                  | Nominal Cold DCR (Ω)* | Nominal I <sup>2</sup> t (A <sup>2</sup> sec) <sup>†</sup> | Voltage (V <sub>DC</sub> ) | Current (A) |
| 0603SFP100F/32-2 | 1.0                                | 0.210                 | 0.08   | 32                         | 50          |
| 0603SFP150F/32-2 | 1.5                                | 0.101                 | 0.11   | 32                         | 50          |
| 0603SFP200F/32-2 | 2.0                                | 0.057                 | 0.24   | 32                         | 50          |
| 0603SFP250F/32-2 | 2.5                                | 0.042                 | 0.56   | 32                         | 50          |
| 0603SFP300F/32-2 | 3.0                                | 0.030                 | 0.72   | 32                         | 50          |
| 0603SFP350F/32-2 | 3.5                                | 0.022                 | 1.10   | 32                         | 50          |
| 0603SFP400F/32-2 | 4.0                                | 0.018                 | 2.08   | 32                         | 50          |
| 0603SFP450F/32-2 | 4.5                                | 0.014                 | 2.63   | 32                         | 50          |
| 0603SFP500F/32-2 | 5.0                                | 0.013                 | 3.25   | 32                         | 50          |
| 0603SFP600F/32-2 | 6.0                                | 0.010                 | 4.00   | 32                         | 70          |

#### 1206 (3216 mm) Pulse Tolerant Chip Fuses

Shape and Dimensions  
mm (in)



|    | A       |         | B       |         | C       |         | D       |         |
|----|---------|---------|---------|---------|---------|---------|---------|---------|
|    | Min     | Max     | Min     | Max     | Min     | Max     | Min     | Max     |
| mm | 3.00    | 3.40    | 0.77    | 1.17    | 0.26    | 0.76    | 1.40    | 1.80    |
| in | (0.118) | (0.134) | (0.030) | (0.046) | (0.010) | (0.030) | (0.055) | (0.071) |

| Part Number      | Typical Electrical Characteristics |                       |  | Max Interrupt Ratings      |             |
|------------------|------------------------------------|-----------------------|--|----------------------------|-------------|
|                  | Rated Current (A)                  | Nominal Cold DCR (Ω)* | Nominal I <sup>2</sup> t (A <sup>2</sup> sec) <sup>†</sup> | Voltage (V <sub>DC</sub> ) | Current (A) |
| 1206SFP100F/63-2 | 1.0                                | 0.340                 | 0.11   | 63                         | 50          |
| 1206SFP150F/63-2 | 1.5                                | 0.150                 | 0.33   | 63                         | 50          |
| 1206SFP200F/63-2 | 2.0                                | 0.090                 | 0.80   | 63                         | 50          |
| 1206SFP250F/32-2 | 2.5                                | 0.070                 | 1.19   | 32                         | 50          |
| 1206SFP300F/32-2 | 3.0                                | 0.035                 | 1.35   | 32                         | 50          |
| 1206SFP350F/32-2 | 3.5                                | 0.029                 | 1.84   | 32                         | 50          |
| 1206SFP400F/32-2 | 4.0                                | 0.023                 | 2.74   | 32                         | 50          |
| 1206SFP450F/32-2 | 4.5                                | 0.021                 | 3.20   | 32                         | 50          |
| 1206SFP500F/32-2 | 5.0                                | 0.017                 | 5.50   | 32                         | 50          |
| 1206SFP600F/24-2 | 6.0                                | 0.013                 | 12.50  | 24                         | 80          |
| 1206SFP700F/24-2 | 7.0                                | 0.010                 | 30.00  | 24                         | 80          |
| 1206SFP800F/24-2 | 8.0                                | 0.009                 | 60.00  | 24                         | 80          |

\* Measured at ≤10% of rated current and 25°C ambient temperature.  
<sup>†</sup> Melting I<sup>2</sup>t at 0.001 sec clear time.

# Surface Mount Fuses

## Pulse Tolerant Chip Fuses

### Figures FP1-FP4 — Family Performance Curves

Figure FP1

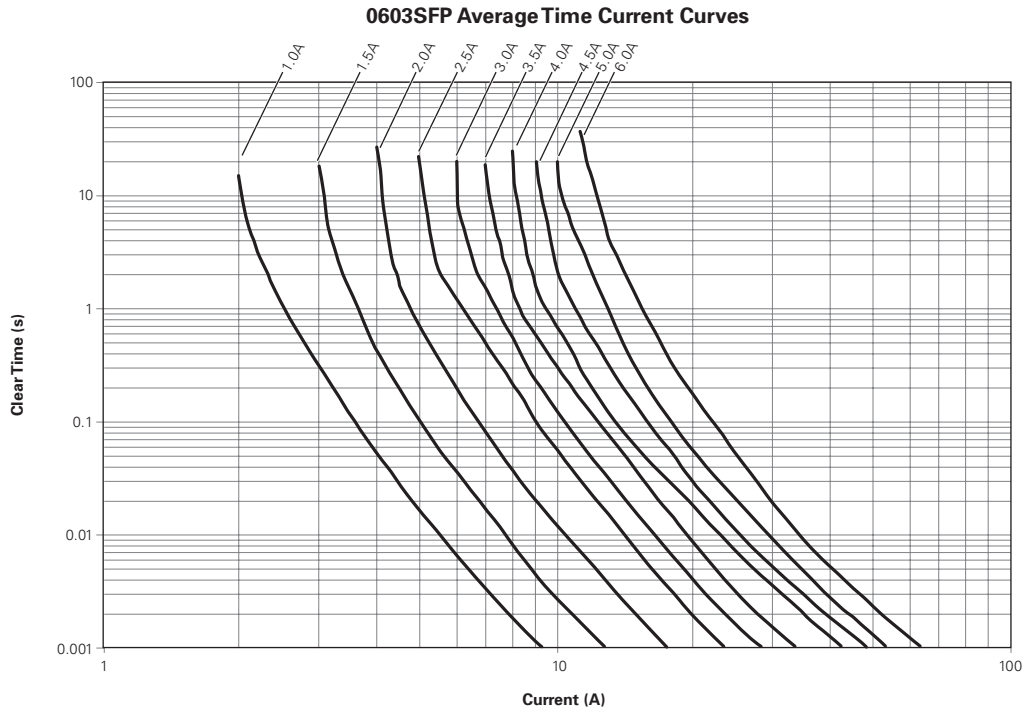
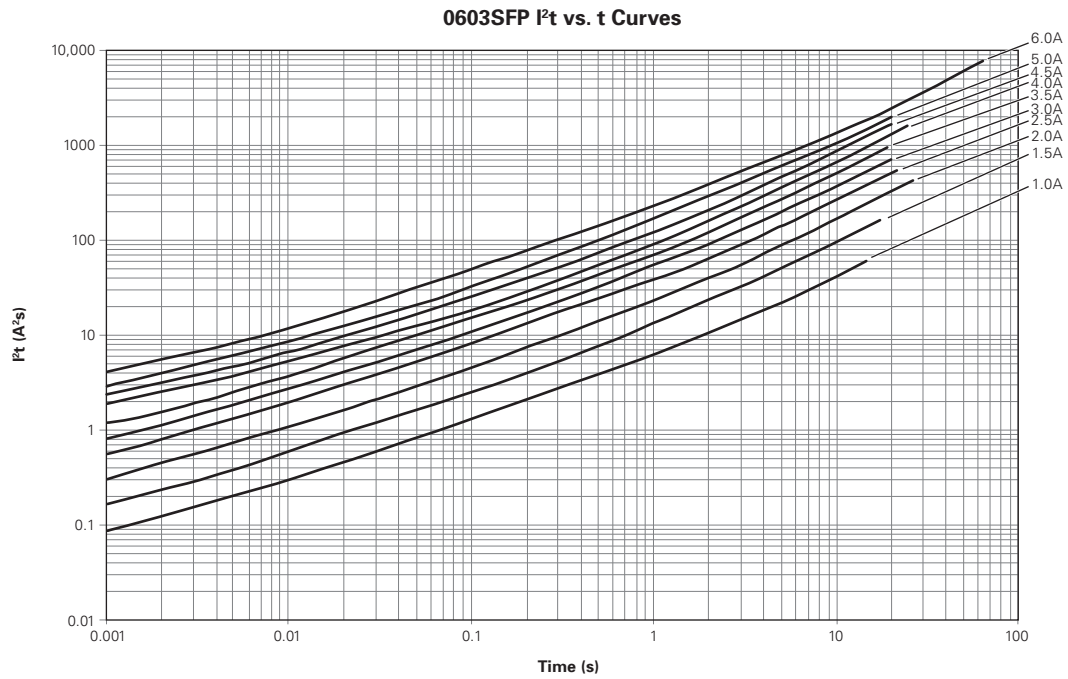


Figure FP2



# Surface Mount Fuses

## Pulse Tolerant Chip Fuses

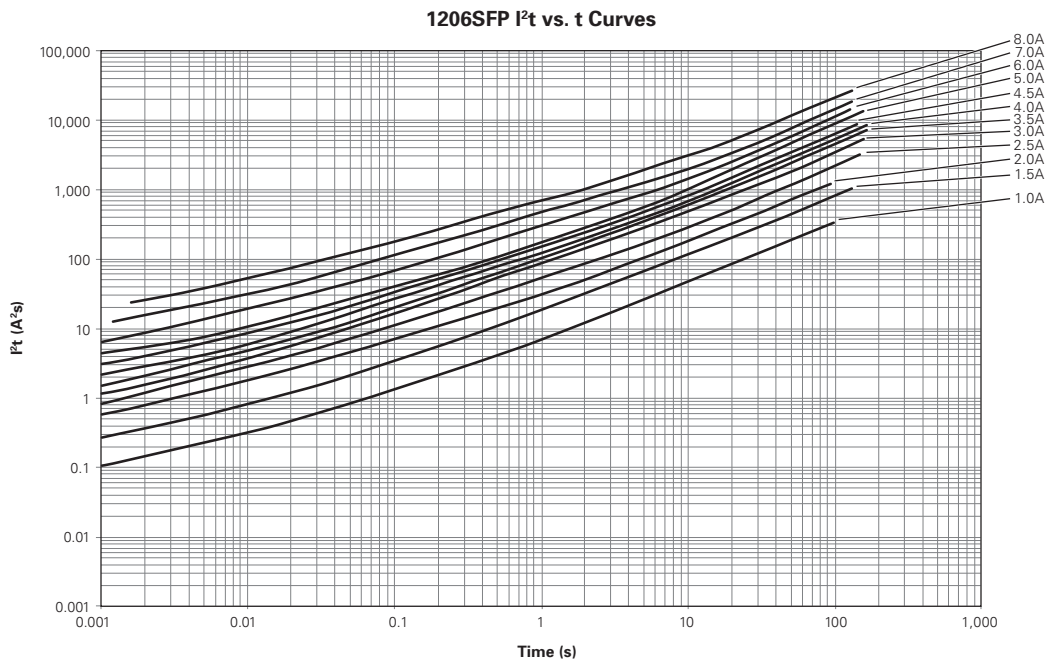
### Figures FP1-FP4 — Family Performance Curves

(Cont'd)

Figure FP3



Figure FP4



Note: Curves are nominal.

## Surface Mount Fuses

### Pulse Tolerant Chip Fuses

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<http://moschip.ru/get-element>

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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