# Surface-mount Fuses
## Pulse Tolerant Chip Fuses

NEW

**Pulse Tolerant chip fuses has high inrush current withstand capability and provide overcurrent protection on DC power systems. Silver fusing element, monolithic and multilayer design provides strong arc suppression characteristics.**

**These RoHS-compliant surface-mount devices 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
- Excellent 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

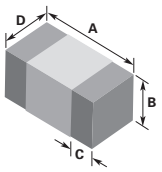
## Table FP1 Clear Time Characteristics for Pulse Tolerant Chip Fuses

| % of rated current | Clear time at 25°C | |
|---|---|---|
| 100% | 4 hours (min.) | |
| 200% | 1 seconds (min.) | 60 seconds (max.) |
| 1000% | 0.0002 second (min.) | 0.02 seconds (max.) |

## Table FP2 Typical Electrical Characteristics and Dimensions for Pulse Tolerant Chip Fuses

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

**Shape and Dimensions**
mm (Inch)

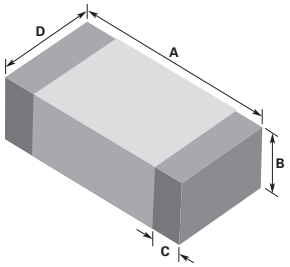



| | A | | B | | C | | D | |
|---|---|---|---|---|---|---|---|---|
| | Min | Max | Min | Max | Min | Max | Min | Max |
| mm | 1.45 | 1.75 | 0.65 | 0.95 | 0.21 | 0.51 | 0.65 | 0.95 |
| in | (0.057) | (0.069) | (0.026) | (0.037) | (0.008) | (0.020) | (0.026) | (0.037) |

| | Typical Electrical Characteristics | | | Max. Interrupt Ratings | |
|---|---|---|---|---|---|
| Part Number | Rated Current (A) | Nominal Cold DCR (Ω)* | Nominal $I^2t$ ($A^2sec$)† | Voltage ($V_{DC}$) | Current (A) |
| 0603SFP100F/32-2 | 1.0 | 0.210 | 0.080 | 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 |

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

**Shape and Dimensions**
mm (Inch)




| | 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) |

| | Typical Electrical Characteristics | | | Max. Interrupt Ratings | |
|---|---|---|---|---|---|
| Part Number | Rated Current (A) | Nominal Cold DCR (Ω)* | Nominal $I^2t$ ($A^2sec$)† | Voltage ($V_{DC}$) | 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 |

* Measured at ≤10% of rated current and 25°C ambient temperature.
† Melting $I^2t$ at 0.001 sec clear time.





RoHS Compliant, ELV Compliant HF Halogen Free