SURFACE-MOUNT FUSES
Fast-Acting Chip Fuses

Littelfuse®
Expertise Applied | Answers Delivered

Fast-acting chip fuses help provide overcurrent protection for systems using DC power sources up to $63V_{DC}$. The fuse's monolithic, multilayer design helps provide the highest hold current in the smallest footprint, reduce diffusion-related aging, improve product reliability and resilience, and enhance high-temperature performance in a wide range of circuit designs.

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

BENEFITS

- Small size with high current ratings
- Temperature stability
- High reliability and resilience
- Strong arc suppression characteristics

FEATURES

- Lead-free 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

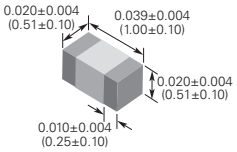
Table FF1 — Clear Time Characteristics

% of Rated Current	Clear Time at 25°C
100%	4 hrs (min)
250%	5 s (max)
400%	0.05 s (max)

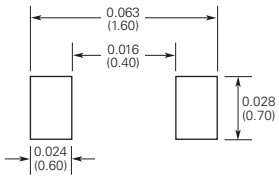
Table FF2 — Typical Electrical Characteristics, Dimensions and Recommended Pad Layout

0402 (1005mm) Fast-Acting Chip Fuses

Shape and Dimensions in (mm)



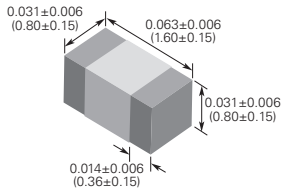
Recommended Pad Layout in (mm)



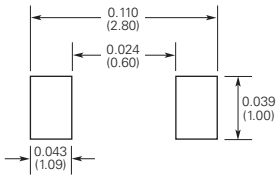
Part Number	Typical Electrical Characteristics			Max Interrupt Ratings	
	Rated Current (A)	Nominal Cold DCR (Ω)*	Nominal I²t (A²sec)†	Voltage (V_{DC})	Current (A)
0402SFF100F/24	1.00	0.120	0.0170	24	35
0402SFF150F/24	1.50	0.056	0.0490	24	35
0402SFF200F/24	2.00	0.035	0.0700	24	35
0402SFF300F/24	3.00	0.021	0.1250	24	35
0402SFF400F/24	4.00	0.014	0.2250	24	35

0603 (1608mm) Fast-Acting Chip Fuses

Shape and Dimensions in (mm)



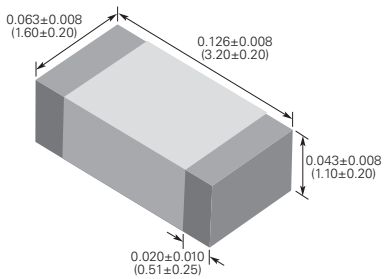
Recommended Pad Layout in (mm)



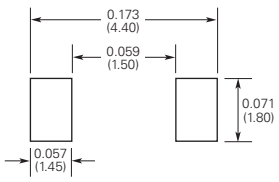
Part Number	Typical Electrical Characteristics			Max Interrupt Ratings	
	Rated Current (A)	Nominal Cold DCR (Ω)*	Nominal I²t (A²sec)†	Voltage (V_{DC})	Current (A)
0603SFF050F/32	0.50	0.485	0.0029	63	35
0603SFF075F/32	0.75	0.254	0.0064	63	35
0603SFF100F/32	1.00	0.147	0.0160	63	35
0603SFF150F/32	1.50	0.059	0.0300	63	35
0603SFF200F/32	2.00	0.044	0.0600	32	35
0603SFF250F/32	2.50	0.032	0.1150	32	35
0603SFF300F/32	3.00	0.025	0.1900	32	35
0603SFF350F/32	3.50	0.024	0.2950	32	35
0603SFF400F/32	4.00	0.018	0.4000	32	35
0603SFF500F/32	5.00	0.013	0.7000	32	35
0603SFF600F/24	6.00	0.010	1.1250	24	35

1206 (3216mm) Fast-Acting Chip Fuses

Shape and Dimensions in (mm)



Recommended Pad Layout in (mm)



Part Number	Typical Electrical Characteristics			Max Interrupt Ratings	
	Rated Current (A)	Nominal Cold DCR (Ω)*	Nominal I²t (A²sec)†	Voltage (V_{DC})	Current (A)
1206SFF050F/63	0.50	0.730	0.0021	63	50
1206SFF075F/63	0.75	0.513	0.0052	63	50
1206SFF100F/63	1.00	0.220	0.0120	63	50
1206SFF150F/63	1.50	0.120	0.0250	63	50
1206SFF175F/63	1.75	0.100	0.0450	63	50
1206SFF200F/63	2.00	0.050	0.0700	63	50
1206SFF250F/32	2.50	0.035	0.1400	32	50
1206SFF300F/32	3.00	0.031	0.2200	32	50
1206SFF400F/32	4.00	0.022	0.3800	32	45
1206SFF500F/32	5.00	0.015	0.6000	32	45
1206SFF600F/32	6.00	0.013	1.0000	32	50
1206SFF700F/32	7.00	0.011	1.7500	32	50
1206SFF800F/32	8.00	0.008	2.5000	32	50
1206SFF600F/24	6.00	0.013	1.0000	24	45
1206SFF700F/24	7.00	0.011	1.7500	24	45
1206SFF800F/24	8.00	0.008	2.5000	24	45

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

HF Halogen Free RoHS Compliant, ELV Compliant

Figures FF1-FF6 — Family Performance Curves

Figure FF1

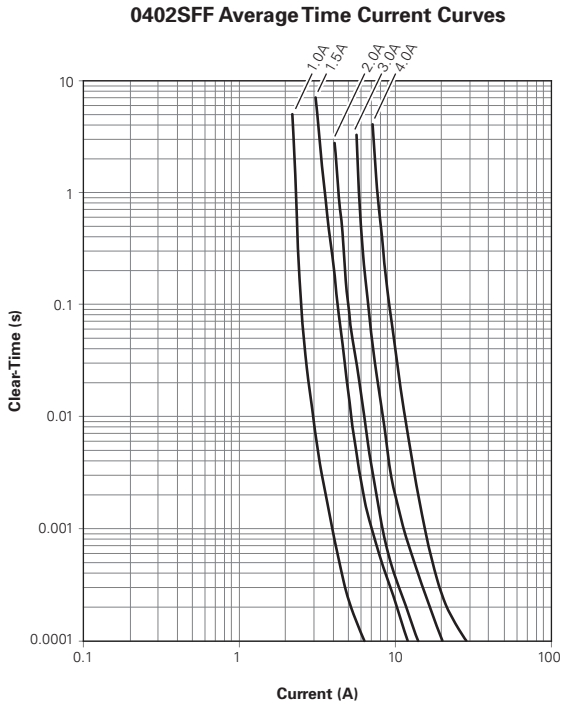
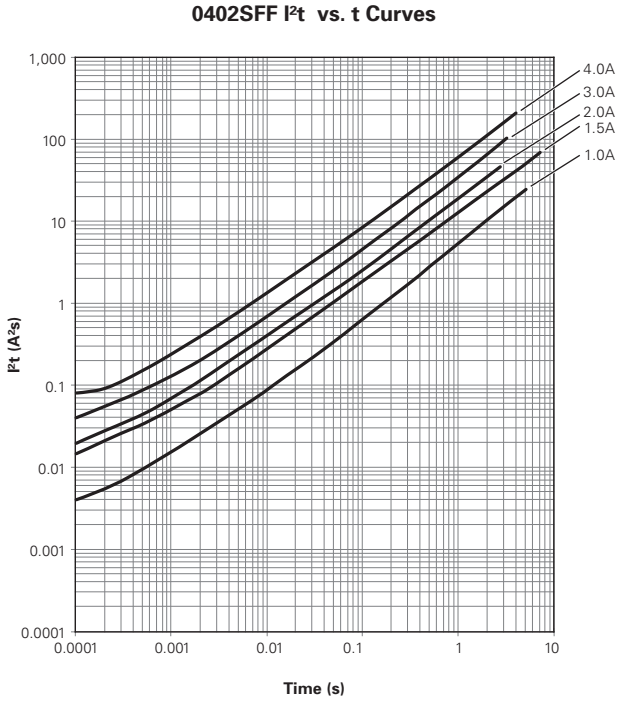


Figure FF2



Note: Curves are nominal.

Figure FF3

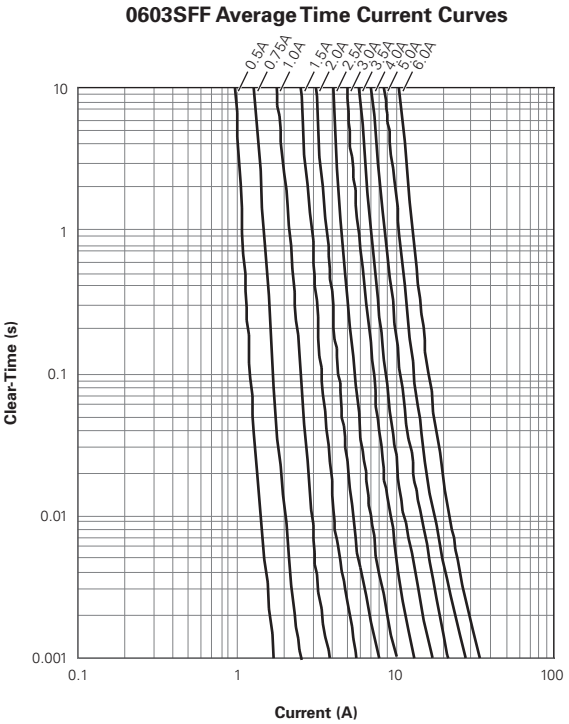
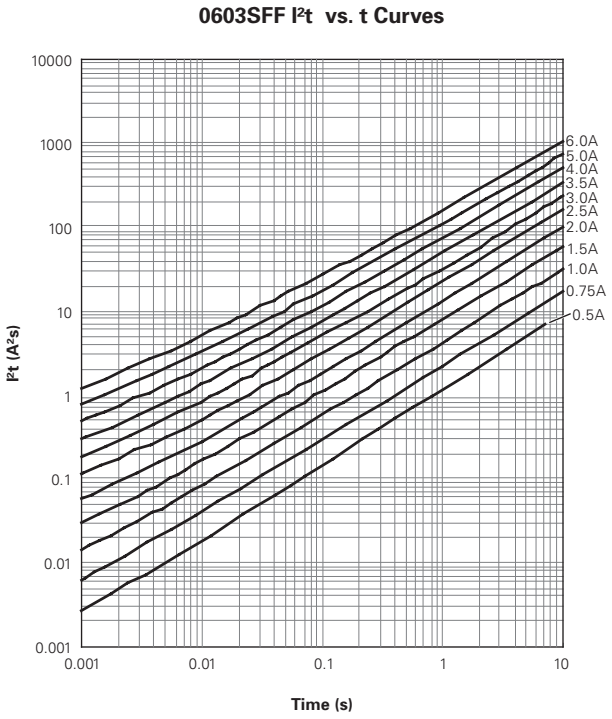


Figure FF4



Note: Curves are nominal.

Figures FF1-FF6 — Family Performance Curves (Cont'd)

Figure FF5

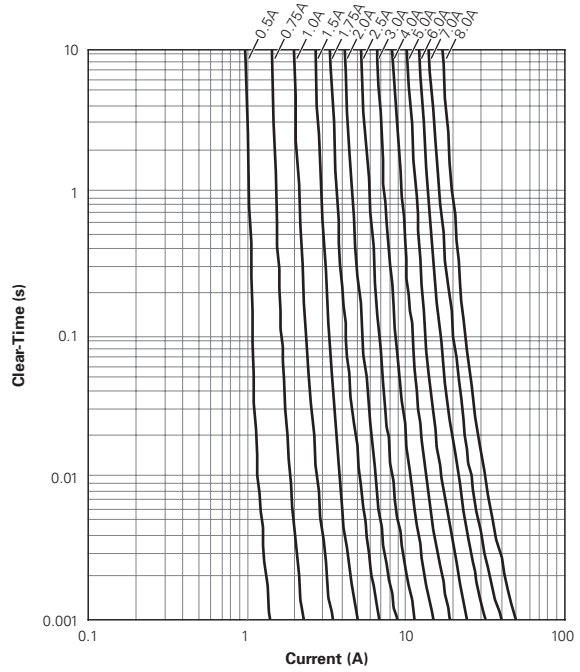
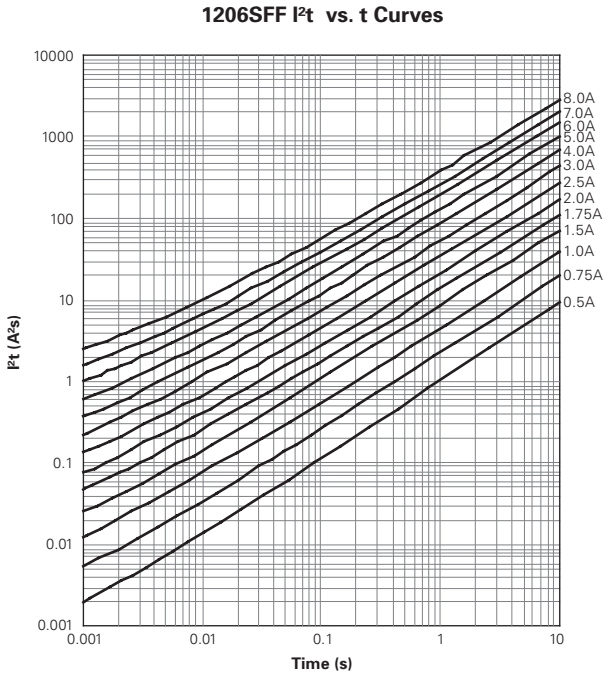


Figure FF6



Note: Curves are nominal.

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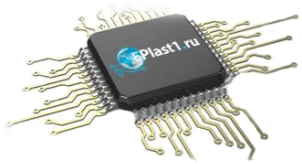
- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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