

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: $\text{Br} \leq 900\text{ppm}$, $\text{Cl} \leq 900\text{ppm}$, $\text{Br} + \text{Cl} \leq 1500\text{ppm}$)
- Monolithic, multilayer design
- High-temperature performance
- -55°C to $+125^{\circ}\text{C}$ operating temperature range

APPLICATIONS

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

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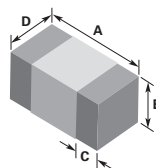
Table FP1 — ClearTime Characteristics

% of Rated Current		ClearTime 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)

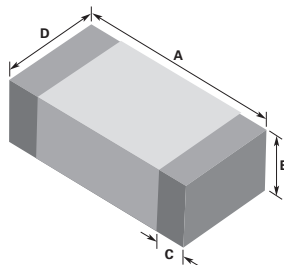


	A		B		C		D	
	Min	Max	Min	Max	Min	Max	Min	Max
mm	1.45	1.75	0.65	0.95	0.21	0.51	0.65	0.95
in	(0.057)	(0.069)	(0.026)	(0.037)	(0.008)	(0.020)	(0.026)	(0.037)

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

† Melting I²t at 0.001 sec clear time.

Figures FP1-FP4 — Family Performance Curves

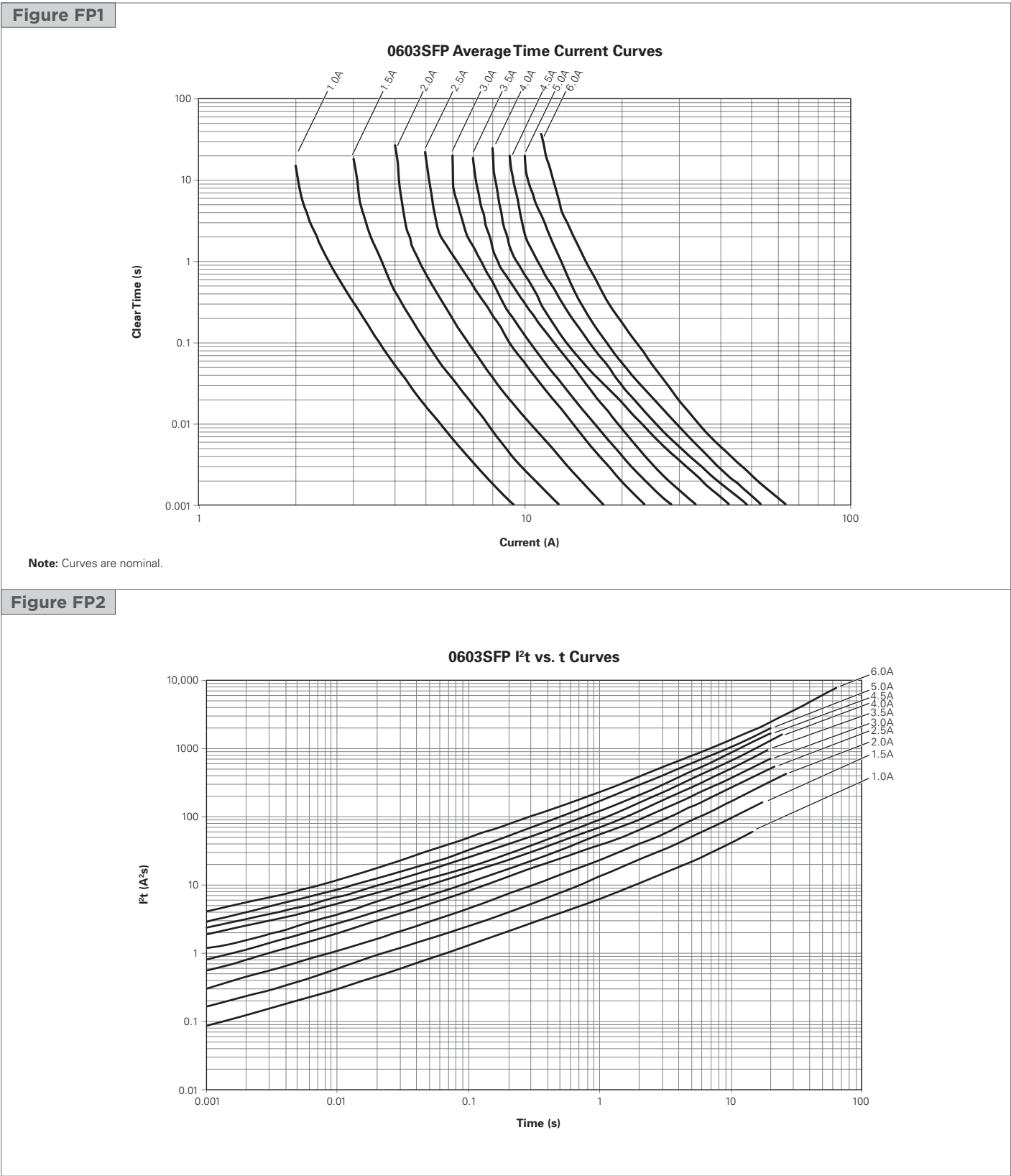


Figure FP3

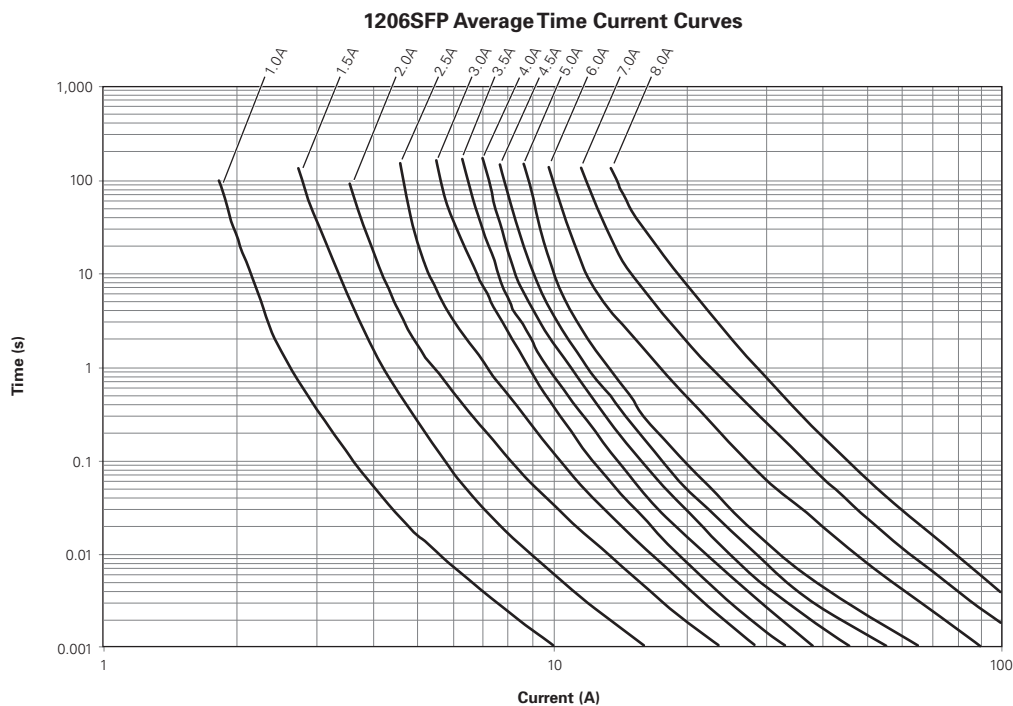
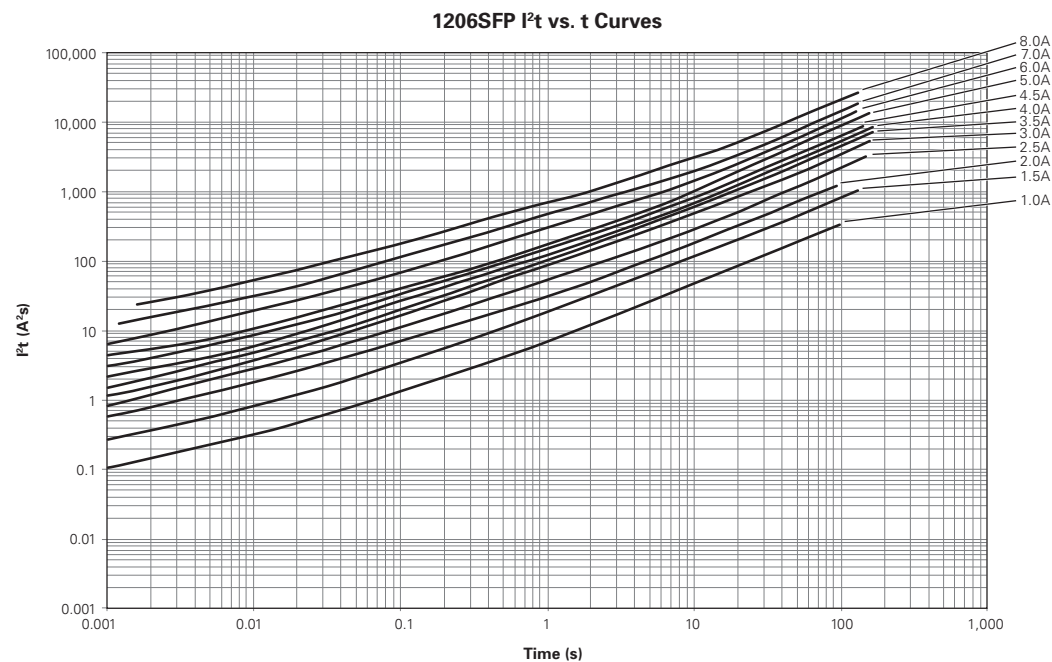


Figure FP4



Note: Curves are nominal.

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