



SinglFuse™

SMD Fuses



BOURNS®

Bourns® SinglFuse™ Introduction

INTRODUCTION

Bourns' SinglFuse™ family of SMD fuses provides effective overcurrent protection in standard surface mountable footprint sizes ranging from 0402 (1005 metric) to 3812 (10030 metric), and includes a variety of fusing speeds, current and voltage ratings, and rated operating temperatures. The breadth of Bourns' comprehensive line of SMD fuses provides suitable overcurrent protection solutions for applications including but not limited to automotive*, battery management systems, power supplies, DC/DC converters, consumer electronics, telecom systems, industrial controllers and battery chargers.

HOW TO ORDER

SinglFuse™ Product Designator

SMD Footprint

SMD Size Code (3812, 2923, 2410, 1210, 1206, 0603, 0402)

Fusing Time & Fuse Category

F = Fast Acting

FP = Fast Acting Precision

S = Slow Blow

SP = Time Lag

FG = Fast Acting, Low Voltage

TL = Time Lag, Low Power

TM = Time Lag, Telecom

HI = High Inrush Current

HC = High Current

HH = High Current, High Inrush

HV = High Voltage, High Current

UC = Ultra High Current

Automotive Grade

AEC-Q200 Compliant Parts

Rating Current

e.g., "010" = 0.10 A, "100" = 1.00 A, "1000" = 10.00 A, etc.

Fuse Structure Type

Blank = Thin Film Sputtering

F = Thin Film PCB

W = Wire Core

M = Ceramic Multilayer

T = Ceramic Tube

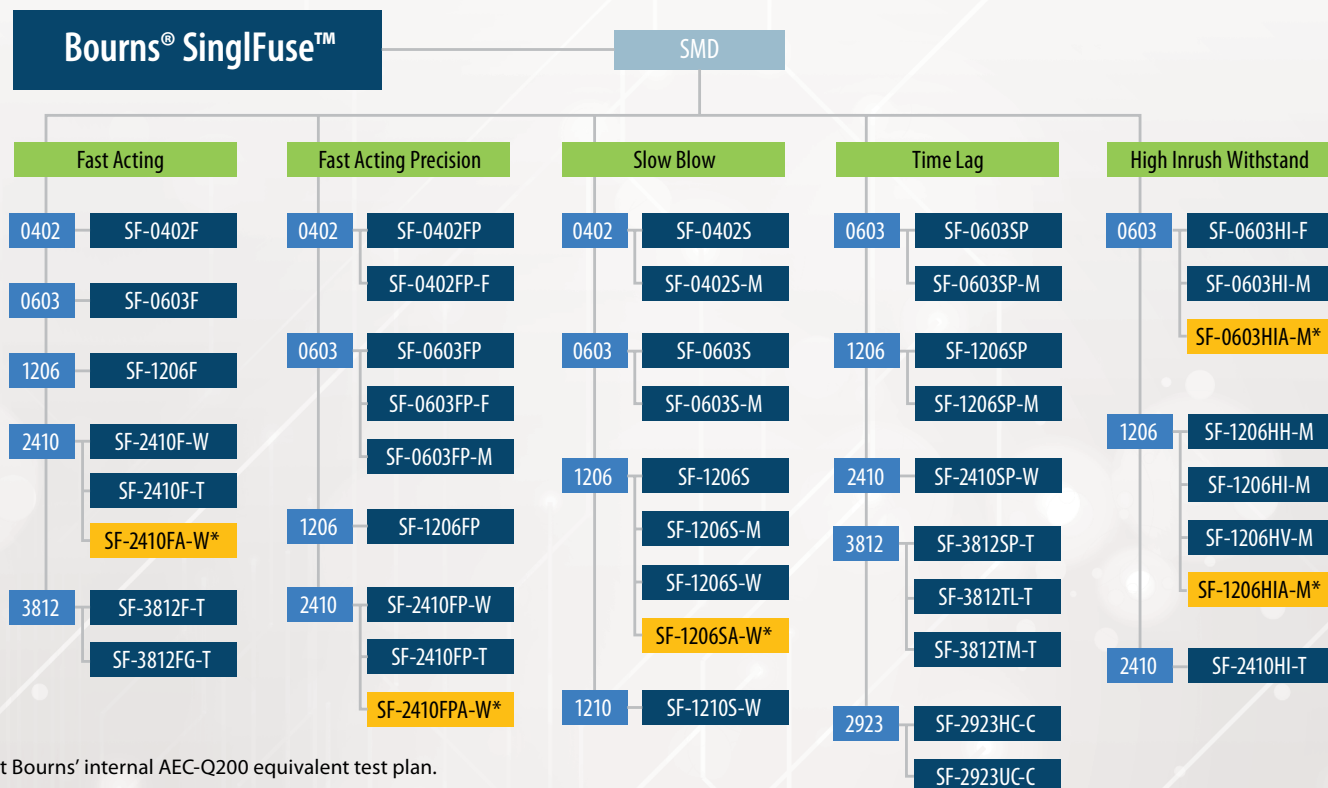
C = Ceramic Cube Housing

Packaging Type

2 = Tape & Reel Packaging

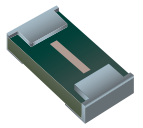

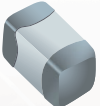


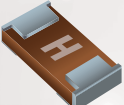
SF - 2410 FP A 100 W - 2

SINGLFUSE™ PORTFOLIO



*Meet Bourns' internal AEC-Q200 equivalent test plan.

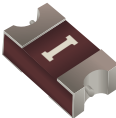
0402 / 0603 Footprint SinglFuse™ SMD Fuses

SF-0402F 	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0402	Fast Acting	200 % I _r in 60 sec.	315 mA – 4 A	32 V _{DC}	–20 °C to +105 °C	UL
SF-0402FP 	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0402	Fast Acting Precision	200 % I _r in 5 sec.	500 mA – 4 A	32 V _{DC}	–20 °C to +105 °C	UL
SF-0402FP-F 	Thin Film PCB Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0402	Fast Acting Precision	300 % I _r in 5 sec. 200 % I _r in 5 sec.	200 mA – 5 A	35 V _{DC}	–55 °C to +90 °C	UL
SF-0402S 	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0402	Slow Blow	250 % I _r in 5 sec.	500 mA – 4 A	32 V _{DC}	–20 °C to +105 °C	UL
SF-0402S-M 	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0402	Slow Blow	250 % I _r in 5 sec.	500 mA – 4 A	24 V _{DC}	–55 °C to +125 °C	UL
SF-0603F 	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	Fast Acting	200 % I _r in 60 sec.	400 mA – 5 A	32 – 50 V _{DC}	–20 °C to +105 °C	UL
SF-0603FP 	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	Fast Acting Precision	200 % I _r in 5 sec.	500 mA – 5 A	32 – 50 V _{DC}	–20 °C to +105 °C	UL
SF-0603FP-M 	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	Fast Acting Precision	200 % I _r in 5 sec.	500 mA – 5 A	32 V _{DC}	–55 °C to +125 °C	UL
SF-0603FP-F 	Thin Film PCB Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	Fast Acting Precision	200 % I _r in 5 sec.	150 mA – 5 A	35 – 65 V _{DC}	–55 °C to +90 °C	UL

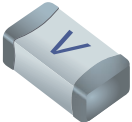
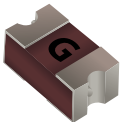
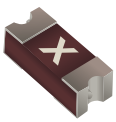
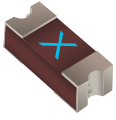

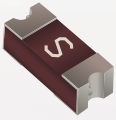
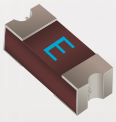


0603 / 1206 Footprint SinglFuse™ SMD Fuses

SF-0603S 	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	Slow Blow	250 % I _r in 5 sec.	400 mA – 6 A	32 – 50 V _{DC}	–20 °C to +105 °C	UL
SF-0603S-M 	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	Slow Blow	250 % I _r in 5 sec.	500 mA – 6 A	24 – 63 V _{DC}	–55 °C to +125 °C	UL
SF-0603SP 	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	Time Lag	200 % I _r in 1 – 120 sec.	500 mA – 6 A	32 – 50 V _{DC}	–20 °C to +105 °C	UL
SF-0603SP-M 	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	Time Lag	200 % I _r in 1 – 120 sec.	1 A – 8 A	32 V _{DC}	–55 °C to +125 °C	UL
SF-0603HI-M 	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	High Inrush	200 % I _r in 60 sec.	1 A – 8 A	32 V _{DC}	–55 °C to +125 °C	UL
SF-0603HIA-M 	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	High Inrush	200 % I _r in 1 – 60 sec.	1 A – 5 A	32 V _{DC}	–55 °C to +125 °C	UL AEC-Q200
SF-0603HI-F 	Thin Film PCB Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	0603	High Inrush	200 % I _r in 60 sec.	500 mA – 4 A	35 – 65 V _{DC}	–55 °C to +90 °C	UL
SF-1206F 	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	Fast Acting	200 % I _r in 60 sec.	500 mA – 7 A	32 – 63 V _{DC}	–20 °C to +105 °C	UL
SF-1206FP 	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	Fast Acting Precision	200 % I _r in 5 sec.	500 mA – 7 A	32 – 63 V _{DC}	–20 °C to +105 °C	UL

1206 Footprint SinglFuse™ SMD Fuses

	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	Slow Blow	250 % I _r in 5 sec.	500 mA – 7 A	32 – 63 V _{DC}	–20 °C to +105 °C	UL
	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	Slow Blow	250 % I _r in 5 sec.	500 mA – 8 A	32 – 63 V _{DC}	–55 °C to +125 °C	UL
	Wire Core Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	Slow Blow	250 % I _r in 5 sec.	1.5 A – 15 A	32 – 65 V _{DC}	–55 °C to +125 °C	UL TUV
	Wire Core Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	Slow Blow	250 % I _r in 5 sec.	1.5 A – 15 A	32 – 110 V _{DC}	–55 °C to +125 °C	UL AEC-Q200
	Thin Film Sputtering Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	Time Lag	200 % I _r in 1 – 120 sec.	500 mA – 7 A	32 – 63 V _{DC}	–20 °C to +105 °C	UL
	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	Time Lag	200 % I _r in 1 – 120 sec.	1 A – 8 A	24 – 63 V _{DC}	–55 °C to +125 °C	UL
	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	High Inrush	350 % I _r in 5 sec. 200 % I _r in 60 sec.	500 mA – 8 A	24 – 63 V _{DC}	–55 °C to +125 °C	UL
	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	High Inrush	350 % I _r in 5 sec. 200 % I _r in 1 – 60 sec.	500 mA – 6 A	24 – 65 V _{DC}	–55 °C to +150 °C	UL AEC-Q200
	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	High Current High Inrush	350 % I _r in 5 sec.	10 A – 30 A	24 V _{DC}	–55 °C to +125 °C	UL

1206 / 1210 / 2410 Footprint SinglFuse™ SMD Fuses

SF-1206HV-M 	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	High Current High Voltage	350 % I_T in 5 sec.	10 A – 40 A	35 V _{DC}	–55 °C to +125 °C	UL
SF-1210S-W 	Wire Core Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1210	Slow Blow	250 % I_T in 5 sec.	1 A – 3 A	125 V _{AC}	–55 °C to +125 °C	UL
SF-2410F-W 	Wire Core Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2410	Fast Acting	200 % I_T in 20 sec.	12A – 20 A	65 V _{AC} /V _{DC}	–55 °C to +125 °C	UL
SF-2410FA-W 	Wire Core Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2410	Fast Acting	200 % I_T in 20 sec.	12A – 20 A	65 V _{DC}	–55 °C to +125 °C	UL AEC-Q200
SF-2410F-T 	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2410	Fast Acting	200 % I_T in 60 sec.	12A – 25 A	65 – 86 V _{AC} /V _{DC}	–55 °C to +125 °C	UL
SF-2410FP-W 	Wire Core Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2410	Fast Acting Precision	200 % I_T in 5 sec.	500 mA – 10 A	250 V _{AC} 125 V _{DC}	–55 °C to +125 °C	UL TUV
SF-2410FPA-W 	Wire Core Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2410	Fast Acting Precision	200 % I_T in 5 sec.	1 A – 10 A	125 – 250 V _{DC}	–55 °C to +125 °C	UL AEC-Q200
SF-2410FP-T 	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2410	Fast Acting Precision	200 % I_T in 5 sec.	62 mA – 10 A	125 V _{AC}	–55 °C to +125 °C	UL
SF-2410SP-W 	Wire Core Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2410	Time Lag	200 % I_T in 1 – 120 sec.	500 mA – 2 A	250 V _{AC}	–55 °C to +125 °C	UL VDE

2410 / 2923 / 3812 Footprint SinglFuse™ SMD Fuses

SF-2410HI-T	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2410	High Inrush	200 % I _r in 60 sec.	375 mA – 7 A	125 V _{AC}	–55 °C to +125 °C	UL
SF-2923HC-C	Ceramic Cube Housing Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2923	High Current	250 % I _r in 60 sec.	20 A – 50 A	60 V _{DC}	–55 °C to +125 °C	UL
SF-2923UC-C	Ceramic Cube Housing Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2923	Ultra-High Current	250 % I _r in 60 sec.	20 A – 100 A	80 V _{DC}	–55 °C to +125 °C	UL
SF-3812F-T	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Fast Acting	200 % I _r in 60 sec.	10 A – 60 A	250 V _{AC}	–55 °C to +125 °C	UL
SF-3812FG-T	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Fast Acting Low Voltage	200 % I _r in 60 sec.	20 A – 30 A	125 V _{AC}	–55 °C to +125 °C	UL
SF-3812SP-T	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Time Lag	200 % I _r in 120 sec.	1.25 A	250 V _{AC}	–55 °C to +125 °C	UL TUV
SF-3812TL-T	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Time Lag Low Power	250 % I _r in 120 sec.	500 mA – 5 A	250 V _{AC}	–55 °C to +125 °C	UL TUV
SF-3812TM-T	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Time Lag Telecom	250 % I _r in 1 – 120 sec.	500 mA – 2 A	600 V _{AC}	–55 °C to +125 °C	UL

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DATA SHEETS





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