



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, 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

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

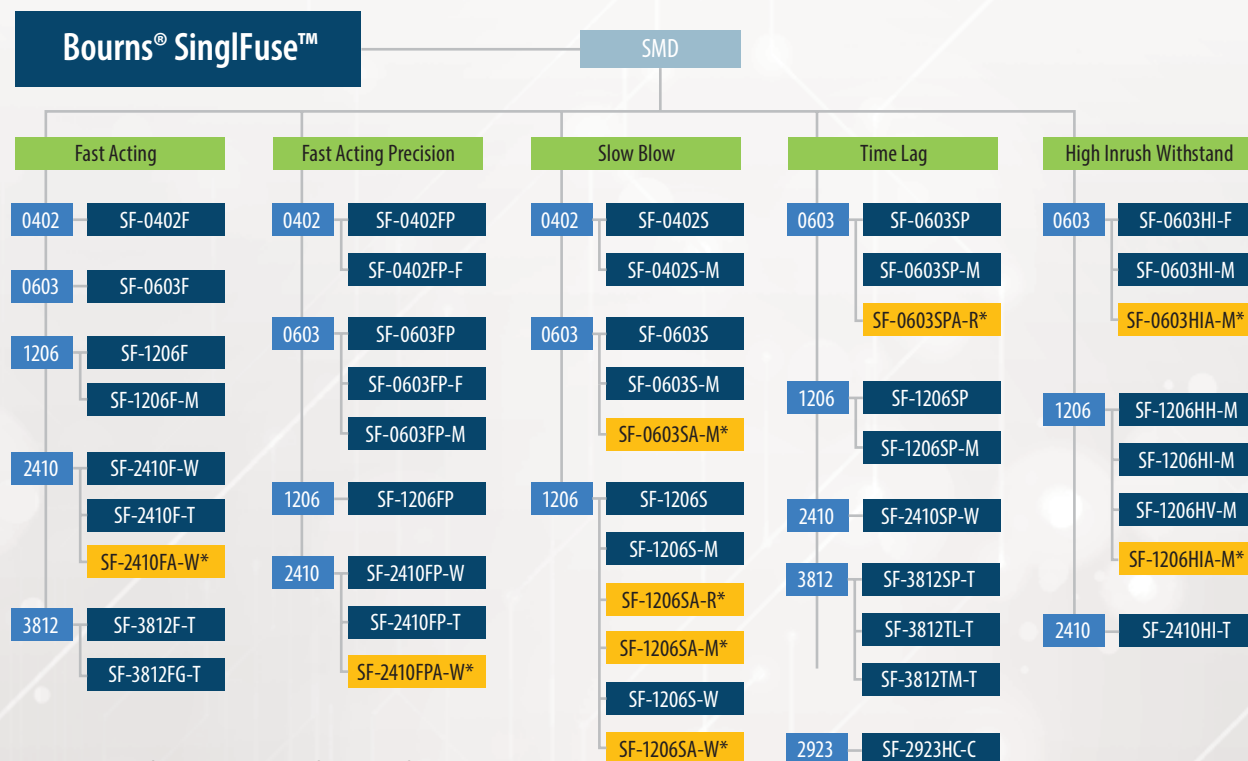
R = Metal Foil

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						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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-0603SA-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.	0.5 A – 8 A	24 – 65 V _{DC}	–55 °C to +150 °C	UL AEC-Q200
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-0603SPA-R 	Metal Foil 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	50/63 V _{DC}	–55 °C to +150 °C	UL/TUV/AEC-Q200
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-1206F-M 	Ceramic Multilayer Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	1206	Fast Acting	200 % I _r in 60 sec. 350 % I _r in 5 sec.	2.5 A – 8 A	48 – 65 V _{DC}	–55 °C to +125 °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

SF-1206S 	Thin Film Sputtering Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	1206	Slow Blow	250 % I _r in 5 sec.	500 mA – 7 A	32 – 63 V _{DC}	–20 °C to +105 °C	UL
SF-1206S-M 	Ceramic Multilayer Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	1206	Slow Blow	250 % I _r in 5 sec.	500 mA – 8 A	32 – 63 V _{DC}	–55 °C to +125 °C	UL
SF-1206SA-M 	Ceramic Multilayer Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	1206	Slow Blow	250 % I _r in 5 sec.	0.5 A – 5 A	65 V _{DC}	–55 °C to +150 °C	UL AEC-Q200
SF-1206SA-R 	Metal Foil Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	1206	Slow Blow	250 % I _r in 5 sec.	10 A – 20 A	32 V _{DC}	–55 °C to +150 °C	UL AEC-Q200
SF-1206S-W 	Wire Core Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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
SF-1206SA-W 	Wire Core Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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
SF-1206SP 	Thin Film Sputtering Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	1206	Time Lag	200 % I _r in 1 – 120 sec.	500 mA – 7 A	32 – 63 V _{DC}	–20 °C to +105 °C	UL
SF-1206SP-M 	Ceramic Multilayer Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	1206	Time Lag	200 % I _r in 1 – 120 sec.	1 A – 8 A	24 – 63 V _{DC}	–55 °C to +125 °C	UL
SF-1206HI-M 	Ceramic Multilayer Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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
SF-1206HIA-M 	Ceramic Multilayer Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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
SF-1206HH-M 	Ceramic Multilayer Technology						Certifications
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	
	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 / 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 _r in 5 sec.	10 A – 40 A	35 V _{DC}	–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 _r 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 _r 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 _r 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 _r 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 _r 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 _r 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 _r 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

	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2410	High Inrush	200 % I_T in 60 sec.	375 mA – 7 A	125 V _{AC}	–55 °C to +125 °C	UL
	Ceramic Cube Housing Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	2923	High Current	250 % I_T in 60 sec.	20 A – 50 A	60 V _{DC}	–55 °C to +125 °C	UL
	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Fast Acting	200 % I_T in 60 sec.	10 A – 60 A	250 V _{AC}	–55 °C to +125 °C	UL
	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Fast Acting Low Voltage	200 % I_T in 60 sec.	20 A – 30 A	125 V _{AC}	–55 °C to +125 °C	UL
	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Time Lag	200 % I_T in 120 sec.	1.25 A	250 V _{AC}	–55 °C to +125 °C	UL TUV
	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Time Lag Low Power	250 % I_T in 120 sec.	500 mA – 5 A	250 V _{AC}	–55 °C to +125 °C	UL TUV
	Ceramic Tube Technology						
	Footprint	Fuse Type	Fusing Time	Rated Current	Rated Voltage	Rated Temperature	Certifications
	3812	Time Lag Telecom	250 % I_T in 1 – 120 sec.	500 mA – 2 A	600 V _{AC}	–55 °C to +125 °C	UL

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DATA SHEETS





Worldwide Sales Offices

Country/Region	Phone	Email
Americas:	+1-951-781-5500	americus@bourns.com
Brazil:	+55 11 5505 0601	americus@bourns.com
China:	+86 21 64821250	asiacus@bourns.com
Europe, Middle East, Africa:	+36 88 885 877	eurocus@bourns.com
Japan:	+81 49 269 3204	asiacus@bourns.com
Korea:	+82 70 4036 7730	asiacus@bourns.com
Singapore:	+65 6348 7227	asiacus@bourns.com
Taiwan:	+886 2 25624117	asiacus@bourns.com
Other Asia-Pacific Countries:	+886 2 25624117	asiacus@bourns.com
Technical Assistance Region	Phone	Email
Asia-Pacific:	+886 2 25624117	techweb@bourns.com
Europe, Middle East, Africa:	+36 88 520 390	eurotech@bourns.com
Americas:	+1-951-781-5500	techweb@bourns.com

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