EOL-Last Buy Date is March 31, 2021

Not recommended for new applications. Please see 0680L

Type SST

Square Ceramic Surface Mount Slow Blow Fuse

HF Pb SST Series – 2410 Size RoHS Compliant

Features

- Slow Blow
- Small size, 2410 SMD
- Wide range of current rating from 375mA to 7A
- Wide operating temperature range
- Tape & Reel for auto-insert SMD process
- Compatible with 260℃, IR Pb-free solder process
- Fully compliance with EU Directive 2011/65/EU and amending directive 2015/863 (MSL = 1)
- Halogen Free
- Lead Free
- AEC-Q Compliant
- Meets Bel automotive qualification*

  * - Largely based on internal AEC-Q test plan



AEC-Q Compliant

Applications

- Notebook
- LCD monitor
- PC computer
- Office electronic equipment
- Industrial equipment
- Medical equipment
- POE, POE+
- LCD / LED monitor
- Power supply
- LCD / LED TV

LEAD FREE = Pb

HALOGEN FREE = HF

Electrical Characteristics (UL/CSA/STD.248-14)

Testing Current	Blow Time	
	Minimum	Maximum
100%	4 Hrs.	N/A
200%	1 Sec	60 Sec
300%	0.2 Sec	3 Sec
800%	0.02 Sec	0.1 Sec

Safety Agency Approvals

Safety Agency	Safety Agency Certificate	Ampere Rating / Voltage Rating	Ampere Range / Volt @ I.R. ability*
	LR39772	375mA-7A/125V AC 125V DC	375mA-7A/125V AC @50A 125V DC @50A
	E20624		

*I.R.= Interrupting Rating = Short Circuit Rating(Amps)

Physical Specifications

Materials	Body : Ceramic
	Terminations : Palladium plated Brass Caps
Marking	On Fuse :
	"Current Rating" in green color, "bel" stamped in end caps.
	On Label :
	"bel", "SST", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and " RoHS ", " e1 "(China RoHS compliant).

Specifications subject to change without notice

bel POWER SOLUTIONS & PROTECTION

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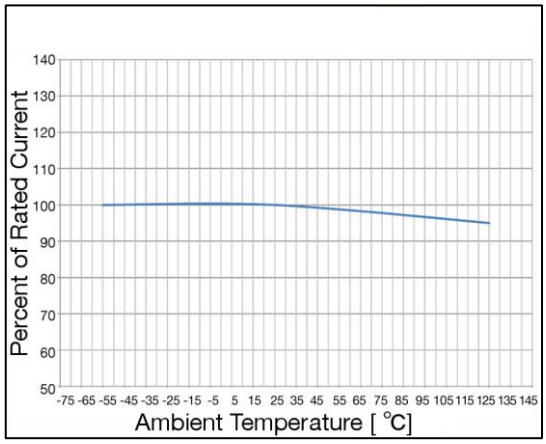
belfuse.com/circuit-protection

Please read our datasheet & drawing disclaimer here.

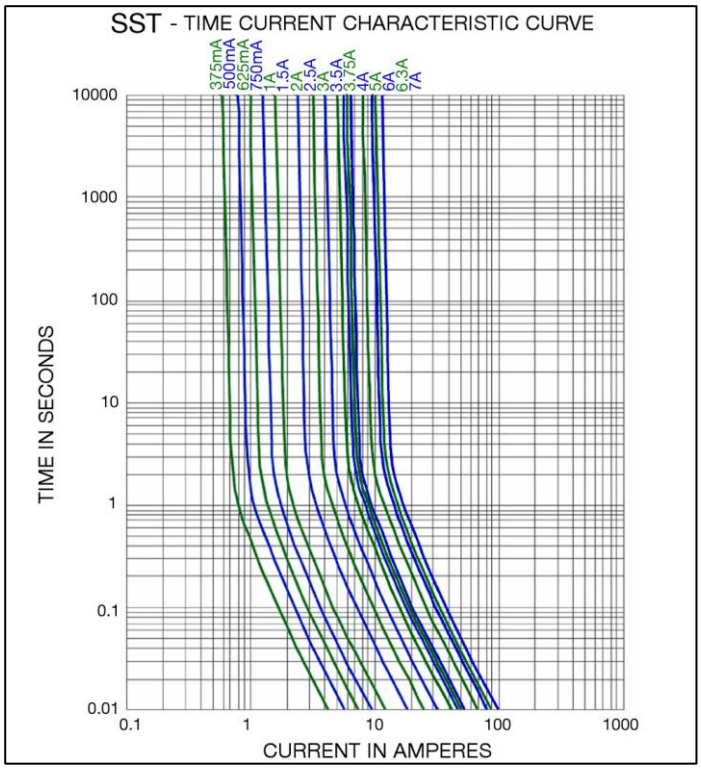
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Type SST

Temperature Derating Curve



Average Time Current Curve



Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohms)	Volt-drop @100% In (Volt) max.	Voltage and Interrupting Ratings	Melting I²T <10 m Sec (A² Sec)	Melting I²T @10 In (A² Sec)	Maximum Power Dissipation (W)	Agency Approvals	
								c UL us	
SST 375	375mA	0.72	0.53	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	0.15	0.15	0.25	Y	Y
SST 500	500mA	0.49	0.52		0.27	0.28	0.30	Y	Y
SST 625	625mA	0.40	0.50		0.45	0.47	035	Y	Y
SST 750	750mA	0.25	0.42		0.66	0.69	0.39	Y	Y
SST 1	1A	0.162	0.35		1.2	1.3	0.47	Y	Y
SST 1.5	1.5A	0.081	0.26		3	3.1	0.62	Y	Y
SST 2	2A	0.061	0.24		5	5.7	0.68	Y	Y
SST 2.5	2.5A	0.044	0.22		9	9	0.74	Y	Y
SST 3	3A	0.033	0.20		14	16	0.80	Y	Y
SST 3.5	3.5A	0.027	0.19		18	20	0.84	Y	Y
SST 3.75	3.75A	0.025	0.19		21	24	0.86	Y	Y
SST 4	4A	0.024	0.19		23	26	0.88	Y	Y
SST 5	5A	0.017	0.18		38	43	0.95	Y	Y
SST 6	6A	0.013	0.18		56	63	1.02	Y	Y
SST 6.3	6.3A	0.012	0.17		62	70	1.03	Y	Y
SST 7	7A	0.011	0.16		80	90	1.08	Y	Y

Consult manufacturer for other ratings

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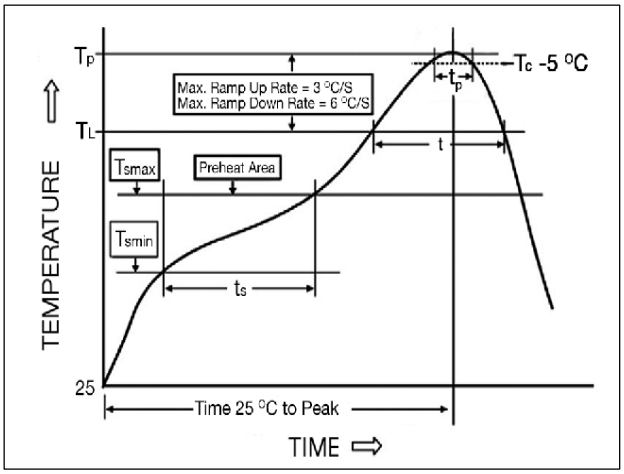
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Environmental Specifications

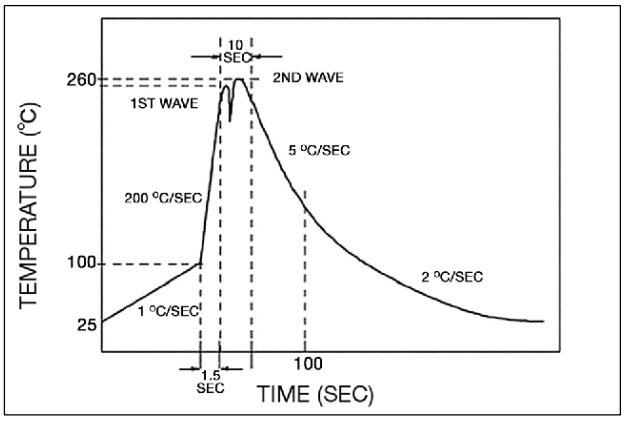
Shock Resistance	MIL-STD-202G, Method 213B, Test Condition 1 (100 G's peak for 6 milliseconds; Sawtooth waveform)
Vibration Resistance	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test Condition B (48 hrs).
Insulation Resistance	MIL-STD-202G, Method 302, Test Condition A (After Opening) 10,000 ohms minimum.
Solderability	MIL-STD-202G, Method 208H
Resistance to solder Heat	MIL-STD-202G, Method 210F, Test Condition C. Top Side (260℃, 20 sec) MIL-STD-202G, Method 210F, Test Condition D. Bottom Side (260℃,10 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65℃to +125℃).
Operating Temperature	-55℃ to +125℃
Moisture Sensitivity Level	1 (According to IPC J-Std-020)

Soldering Parameters

IR Reflow Profile (IPC/JEDEC J-STD-020D)	
Preheat & Soak Temperature min (Tsmin) Temperature max (Tsmax) Time (Tsmin to Tsmax) (ts)	 150℃ 200℃ 60-120 seconds
Average ramp-up rate (Tsmax to Tp)	3℃/second max.
Liquidous temperature (TL) Time at liquidous (tL)	217℃ 60-150 seconds
Peak temperature (Tp)	260℃ max
Time (tp) within 5℃ of the specified classification temperature (Tc)	30 seconds
Average ramp-down rate (Tp to Tsmax)	6℃/second max.
Time 25℃ to peak temperature	8 minutes max.



Lead-free Wave Soldering Profile	
Wave Soldering Parameter	
Average ramp-up rate	200℃ / second
Heating rate during preheat	typical 1 - 2℃ / second Max 4℃ / second
Final preheat temperature	within 125℃ of soldering temperature
Peak temperature Tp	260℃
Time within +0℃ / -5℃ of actual peak temperature	10 seconds
Ramp-down rate	5℃ / second max.



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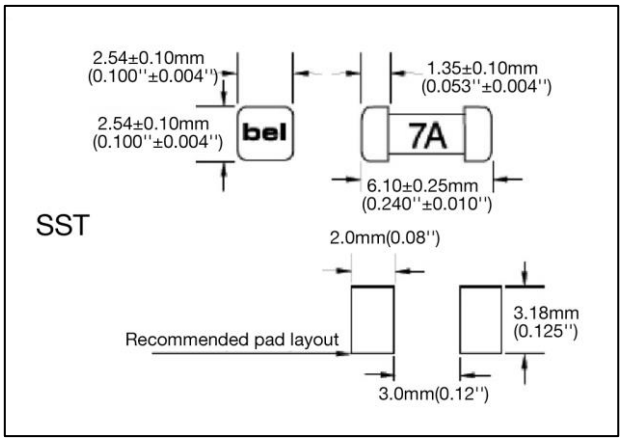
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Fuse FGNO Explanation
0680 - [XXXX] X XX
0680-=SST; [XXXX]=Ampere Rating; XX=See Ordering Information as below

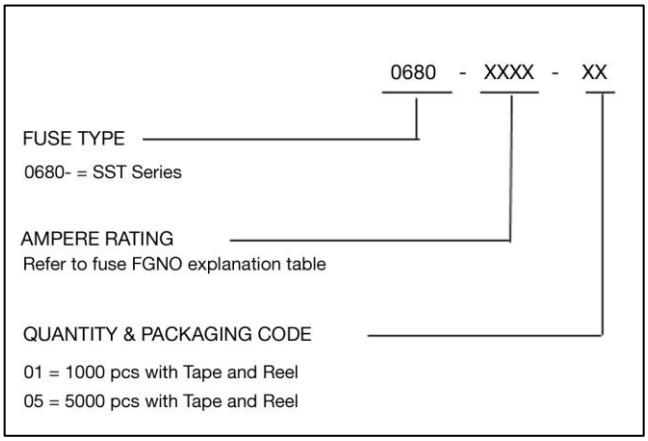
Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
3/8	0.375	375	0375
1/2	.500	500	0500
	.625	625	0625
3/4	.750	750	0750

Fraction	Decimal	Amps	Bel FGNO[XXXX]
	1.0	1	1000
1-1/2	1.5	1.5	1500
	2.0	2	2000
2-1/2	2.5	2.5	2500
	3.0	3	3000
3-1/2	3.5	3.5	3500
	3.75	3.75	3750
	4.0	4	4000
	5.0	5	5000
	6.0	6	6000
	6.3	6.3	6300
	7.0	7	7000

Mechanical Dimensions



Ordering Information



Packaging

Packaging Tape & Reel	Packaging Specification	Quantity	Quantity & Packaging Code
12 mm wide tape with 13 inches Diameter reel	EIA Standard 481-E	5000	05
12 mm wide tape with 7 inches Diameter reel	EIA Standard 481-E	1000	01

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