

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°C, 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*
SP	LR39772	375mA-7A/125V AC 125V DC	375mA-7A/125V AC @50A 125V DC @50A
UL	E20624		

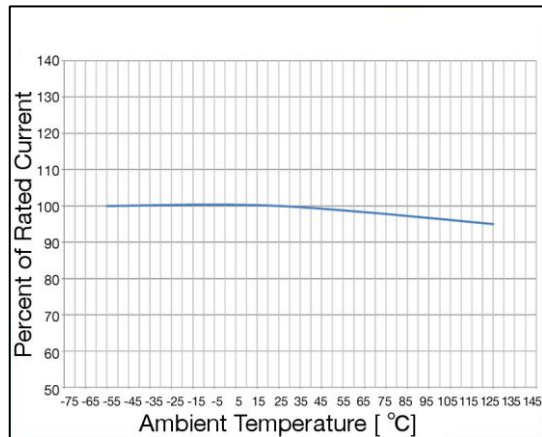
*I.R.= Interrupting Rating = Short Circuit Rating(Amps)

Physical Specifications

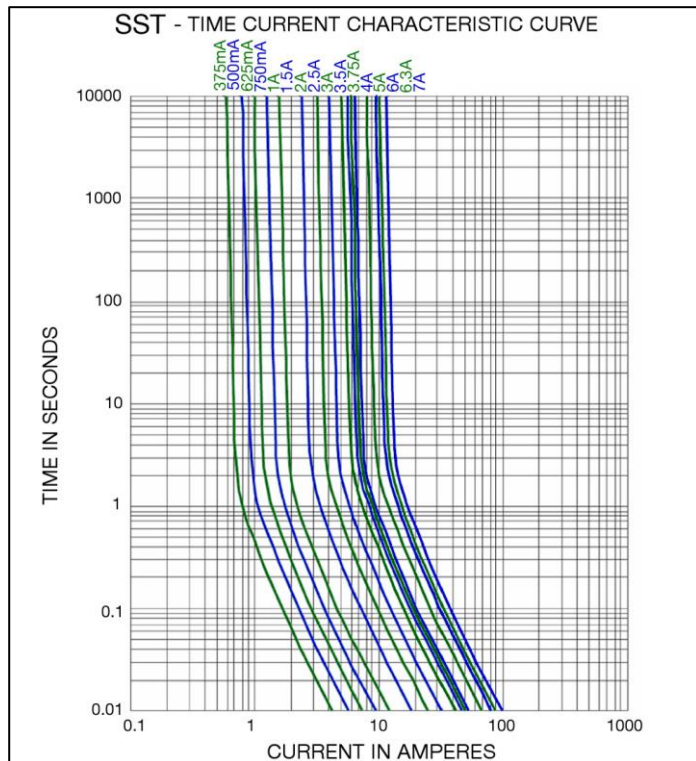
Materials	Body : Ceramic
	Terminations : Palladium plated Brass Caps
Marking	On Fuse :
	"Current Rating" in green color, "bel" stamped in end caps.
	On Label :
	"bel", "SST", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and "  ", "  "(China RoHS compliant).

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 I ² T <10 m Sec (A ² Sec)	Melting I ² T @10 In (A ² Sec)	Maximum Power Dissipation (W)	Agency Approvals	
									
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	0.35	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

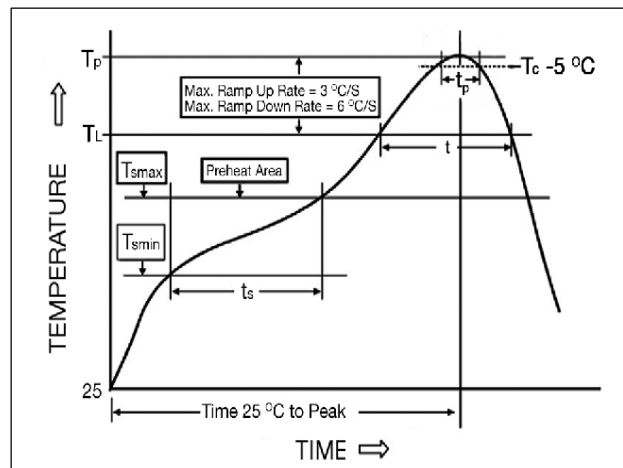
Type SST

Environmental Specifications

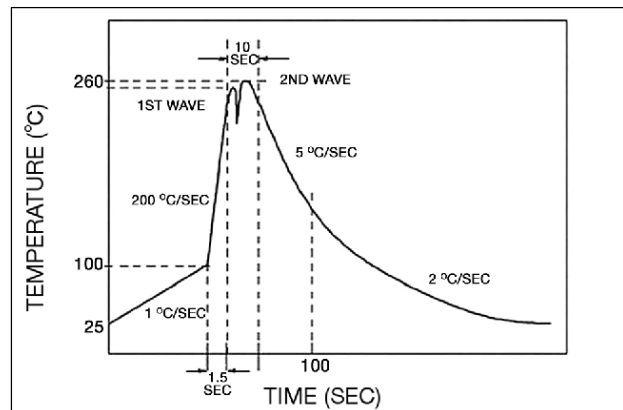
Shock Resistance	MIL-STD-202G, Method 213B, Test Condition 1 (100 G's peak for 6 milliseconds; Sawtooth waveform)
Vibration Resistance	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test Condition B (48 hrs).
Insulation Resistance	MIL-STD-202G,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

Soldering Parameters

IR Reflow Profile (IPC/JEDEC J-STD-020D)	
Preheat & Soak	
Temperature min (T _{min})	150°C
Temperature max (T _{max})	200°C
Time (T _{min} to T _{max}) (t _s)	60-120 seconds
Average ramp-up rate (T _{max} to T _p)	3°C/second max.
Liquidous temperature (T _L)	217°C
Time at liquidous (t _L)	60-150 seconds
Peak temperature (T _p)	260°C max
Time (t _p) within 5°C of the specified classification temperature (T _c)	30 seconds
Average ramp-down rate (T _p to T _{max})	6°C/second max.
Time 25°C to peak temperature	8 minutes max.



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



Type SST

Fuse FGNO Explanation

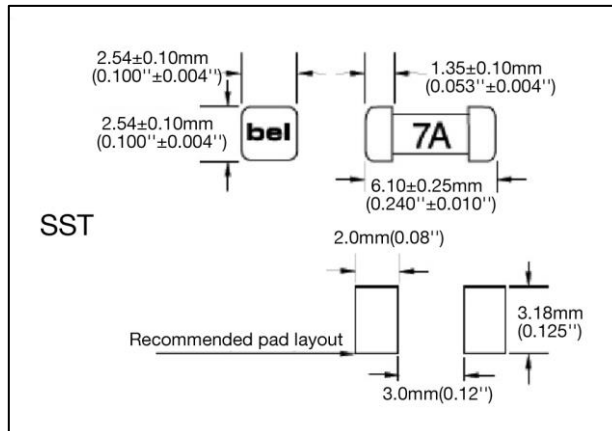
0680 - [XXXX] X XX

0680=SST; [XXXX]=Ampere Rating; XX=See Ordering Information as below

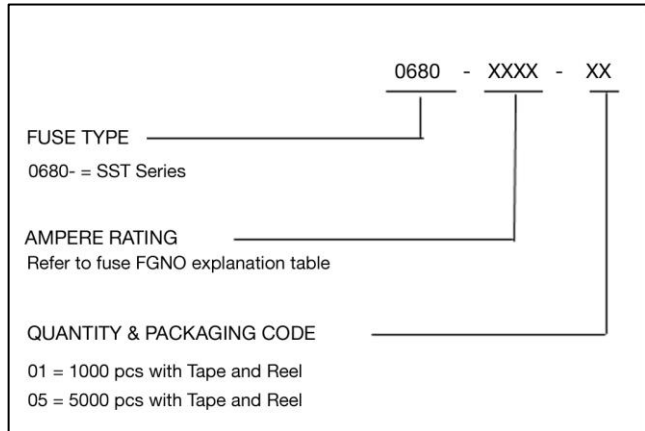
Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
3/8	0.375	375	0375
1/2	.500	500	0500
	.625	625	0625
3/4	.750	750	0750

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