

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)

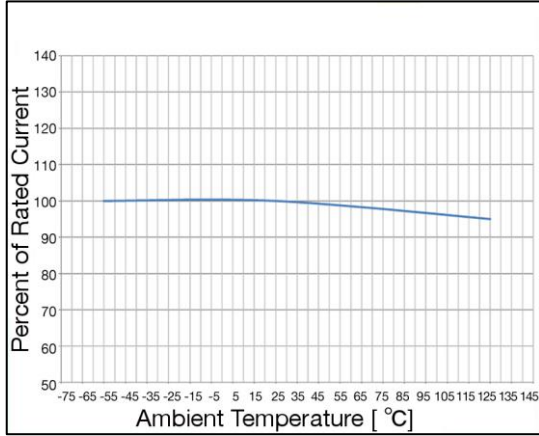
Physical Specifications

| | |
|-----------|--|
| 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). |

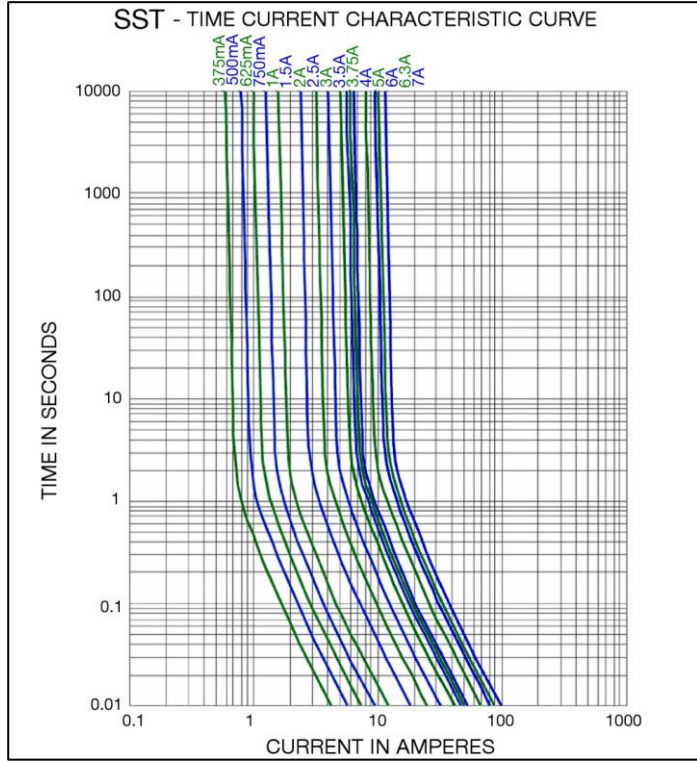
Specifications subject to change without notice

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



Specifications subject to change without notice

Bel Fuse Inc.
206 Van Vorst Street
Jersey City, NJ 07302 USA

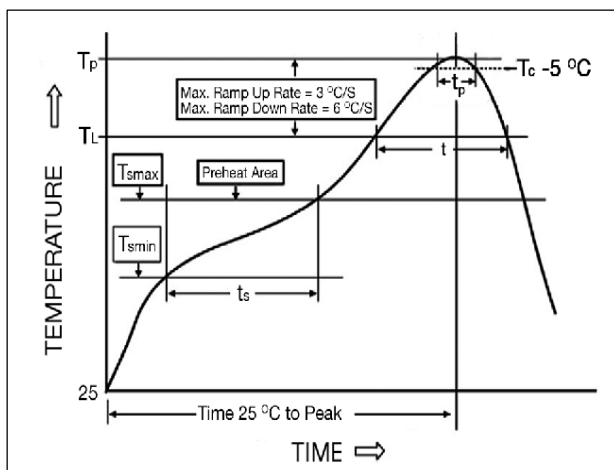
+1 201.432.0463
Bel.US.CS@belf.com
belfuse.com/circuit-protection

Environmental Specifications

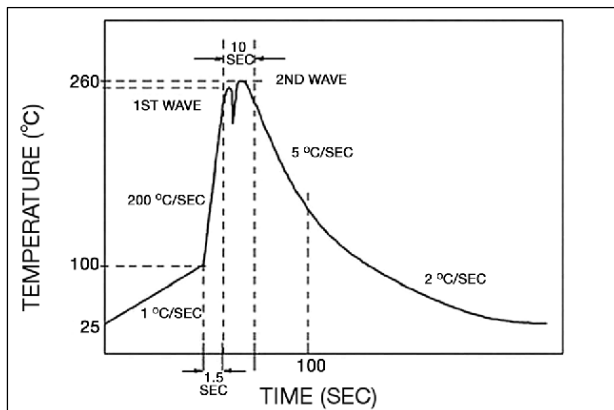
| | |
|----------------------------|---|
| Shock Resistance | MIL-STD-202G, Method 213B, Test Condition 1 (100 G's peak for 6 milliseconds; Sawtooth waveform) |
| Vibration Resistance | MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion). |
| Salt Spray Resistance | MIL-STD-202G, Method 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}) (ts) | 60-120 seconds |
| Average ramp-up rate (T _{max} to T _p) | 3°C/second max. |
| Liquidous temperature (TL) | 217°C |
| Time at liquidous (tL) | 60-150 seconds |
| Peak temperature (T _p) | 260°C max |
| Time (tp) 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

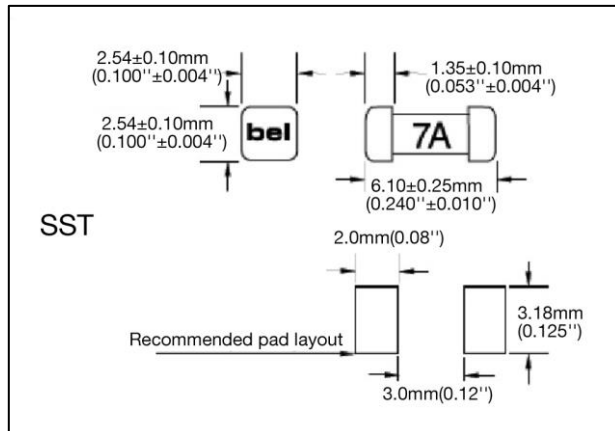
0680 - [XXXX] X XX

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

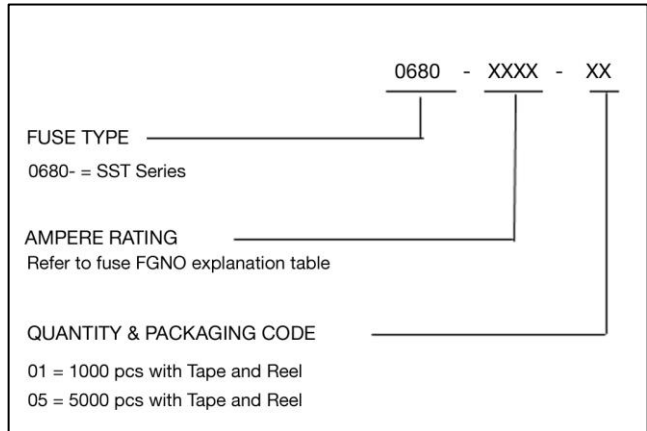
| Fraction | Decimal | Milliamps | Bel FGNO[XXXX] |
|----------|---------|-----------|----------------|
| 3/8 | 0.375 | 375 | 0375 |
| 1/2 | .500 | 500 | 0500 |
| | .625 | 625 | 0625 |
| 3/4 | .750 | 750 | 0750 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | |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

| 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 |





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Bel Fuse Inc.
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Jersey City, NJ 07302 USA

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belfuse.com/circuit-protection

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View SST 1.5 on WIN SOURCE](#)
-  [Bel Fuse Inc. Information](#)

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