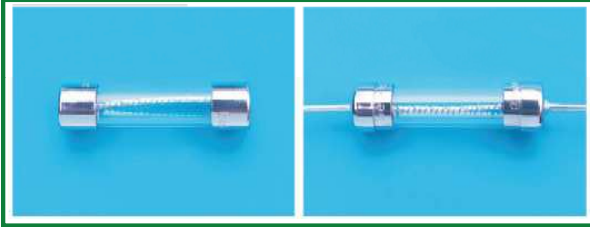


## Type 3SB / 3SBP Slow Blow Fuse Series

6 x 32 mm Glass Tube  
RoHS 6 Compliant

HF  3SB / 3SBP Series, 6 x 32mm Slow Blow Fuse



### Description

6x32mm Slow Blow, glass tube body cartridge fuse designed, approved and complied with UL and CSA standard 248-14.

### Features

- Meet UL and CSA standard 248-14
- Wide operating temperature range
- Bulk and Tape & Reel packing available
- RoHS6 compliant
- Halogen Free
- Leadfree

### Applications

Provide individual protection for components or internal circuits.

- Power Supplies
- Battery charger
- Monitor
- Adapter





LEAD FREE = 

HALOGEN FREE = 

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

Testing current	Blow Time	
	Minimum	Maximum
100%	4 Hrs.	N/A
135%	N/A	1 Hr
200%	5 sec	30 sec

### Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE NUMBER	AMPERE RANGE / VOLT @ I.R.ABILITY
	E20624	63mA -8A / 125V AC @10,000A 63mA - 8A / 250V AC @200A 8.1A - 15A / 125V AC @10,000A
	LR39772	63mA -1A / 250V AC @35A >1A - 3.5A / 250V AC @100A >3.5A - 8A / 250V AC @200A 8.1A - 15A / 125V AC @10,000A
	JET 1037-31003-1010 JET 1037-31003-1011	1A - 5A / 125V AC @500A
	JET 1037-31003-1007	>5A - 15A / 125V AC @300A
		63mA -8A / 125V AC @10,000A 63mA - 8A / 250V AC @200A 8.1A - 15A / 125V AC @10,000A

Specifications Subject to change without notice.

# Type 3SB / 3SBP

## Slow Blow Fuse Series

6 x 32 mm Glass Tube  
RoHS 6 Compliant



# bel

3SB May2012D

### Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohm)	Volt-drop @100% In (Volt) Max.	Voltage Rating (V)	Interrupting Rating	Melting I <sup>2</sup> T <10 m Sec (A <sup>2</sup> Sec)	Melting I <sup>2</sup> T @ 10 In (A <sup>2</sup> Sec)	Maximum Power Dissipation (W)	Agency Approvals				
3SB(P) 63-R	63mA	75.5	7.33	250	63mA - 8A / 125V AC @10,000A	0.09	0.10	0.7	Y	Y		Y	
3SB(P) 80-R	80mA	48.4	6.27	250		0.13	0.15	0.7	Y	Y		Y	
3SB(P) 100-R	100mA	29.4	4.41	250		0.21	0.24	0.5	Y	Y		Y	
3SB(P) 125-R	125mA	17.5	3.45	250		0.32	0.37	0.6	Y	Y		Y	
3SB(P) 160-R	160mA	12.3	3.13	250		0.50	0.58	0.6	Y	Y		Y	
3SB(P) 200-R	200mA	7.1	2.13	250		0.77	0.91	0.6	Y	Y		Y	
3SB(P) 250-R	250mA	5.0	1.97	250		1.2	1.4	0.6	Y	Y		Y	
3SB(P) 300-R	300mA	3.2	1.52	250		1.9	2.2	0.7	Y	Y		Y	
3SB(P) 375-R	375mA	2.14	1.26	250		2.6	3.2	0.7	Y	Y		Y	
3SB(P) 500-R	500mA	1.38	1.07	250		4.4	5.4	0.8	Y	Y		Y	
3SB(P) 750-R	750mA	0.642	0.68	250		9	10	0.8	Y	Y		Y	
3SB(P) 1-R	1A	0.374	0.59	250		63mA - 8A / 250V AC @200A	16	21	0.9	Y	Y	Y	Y
3SB(P) 1.25-R	1.25A	0.248	0.43	250			25	32	0.9	Y	Y	Y	Y
3SB(P) 1.6-R	1.6A	0.155	0.38	250		39	50	1.0	Y	Y	Y	Y	
3SB(P) 2-R	2A	0.115	0.36	250		8.1A - 15A / 125V AC @10,000A	61	79	1.0	Y	Y	Y	Y
3SB(P) 2.5-R	2.5A	0.079	0.29	250			94	123	1.1	Y	Y	Y	Y
3SB(P) 3-R	3A	0.058	0.27	250			146	192	1.1	Y	Y	Y	Y
3SB(P) 4-R	4A	0.039	0.23	250			226	300	1.2	Y	Y	Y	Y
3SB(P) 5-R	5A	0.029	0.22	250			349	469	1.3	Y	Y	Y	Y
3SB(P) 6-R	6A	0.018	0.19	250			286	455	1.6	Y	Y	Y	Y
3SB(P) 7-R	7A	0.016	0.18	250	372		592	1.8	Y	Y	Y	Y	
3SB(P) 8-R	8A	0.013	0.17	250	483		769	1.9	Y	Y	Y	Y	
3SB(P) 10-R	10A	0.010	0.17	250	817		1300	2.3	Y	Y	Y	Y	
3SB(P) 12-R	12A	0.008	0.15	250	1277		2031	2.6	Y	Y	Y	Y	
3SB(P) 15-R	15A	0.006	0.15	250	2123	3377	3.0	Y	Y	Y	Y		

Consult manufacturer for other ratings

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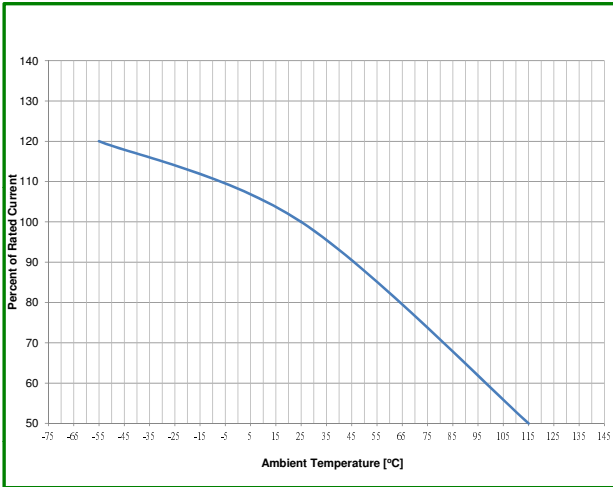
# Type 3SB / 3SBP Slow Blow Fuse Series

6 x 32 mm Glass Tube  
RoHS 6 Compliant



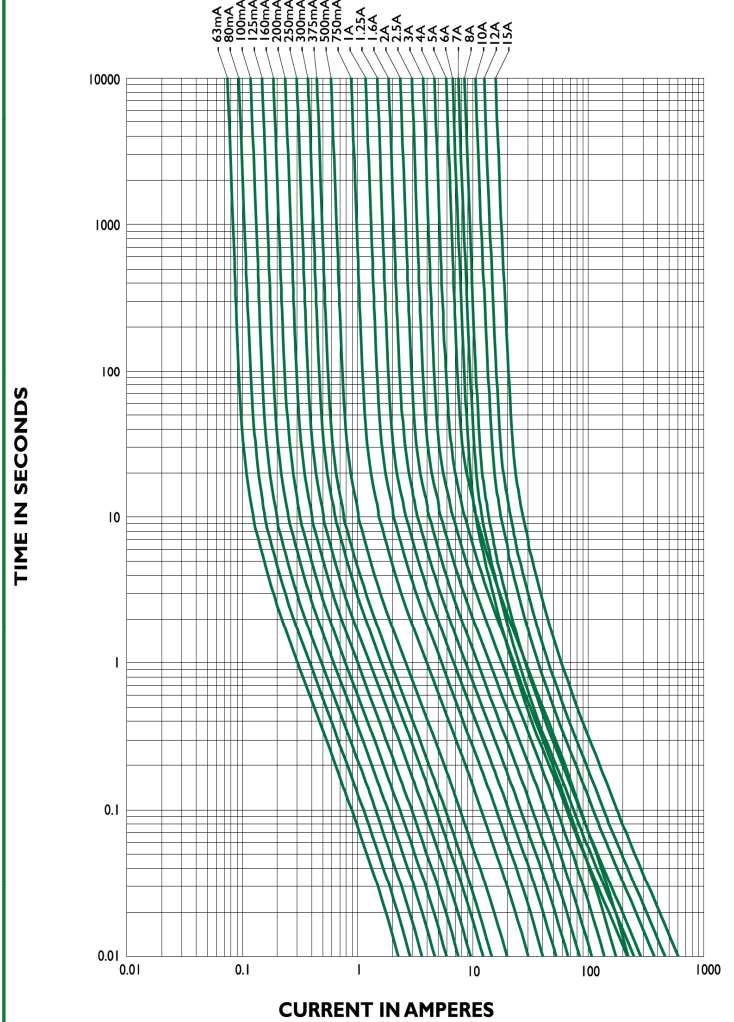
3SB May2012C

## Temperature Derating Curve



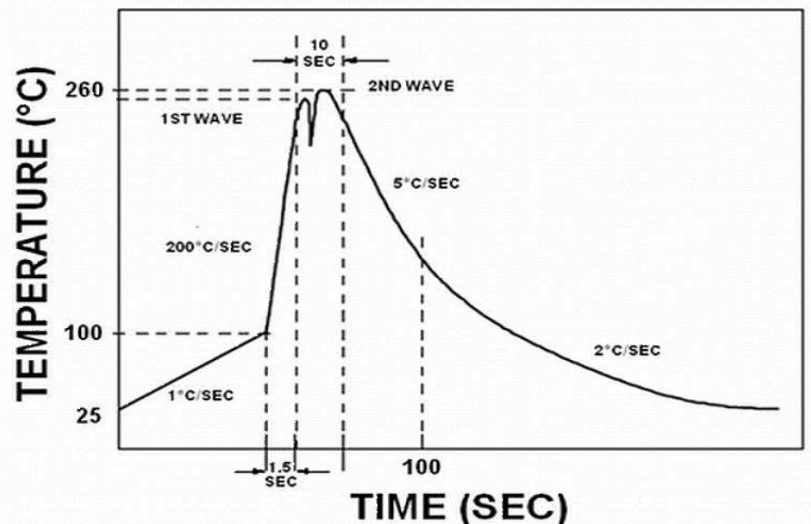
## Average Time Current Curve

### 3SB / 3SBP - TIME CURRENT CHARACTERISTIC CURVE



## Soldering Parameters

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 <sub>p</sub>	260°C
Time within +0 °C / -5°C of actual peak temperature	10 seconds
Ramp-down rate	5 °C / second max.



# Type 3SB / 3SBP Slow Blow Fuse Series

6 x 32 mm Glass Tube  
RoHS 6 Compliant



3SB May2012D

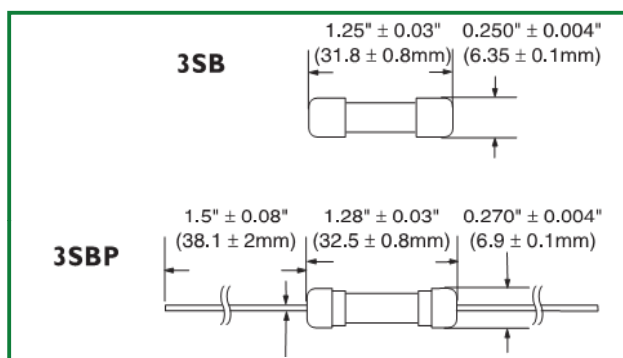
## Physical Specifications

<b>Materials</b>	Body : Glass
	Cap : Nickel Plated Brass Caps
	Leads: Matte Tin Plated Copper
<b>Marking</b>	On Fuse:
	"bel" , "3SB" , " Current Rating" ,"Voltage Rating" , "Appropriate Safety Logos" , " (RoHS 6 compliant)
	On label:
	"bel" , "3SB" , or "3SBP" ,"Current Rating" ,"Voltage Rating" ,"Interrupting Rating" , "Appropriate Safety Logos" and " (China RoHS compliant).

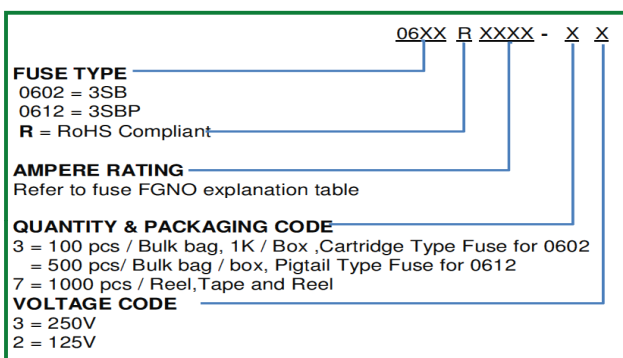
## Environmental Specifications

<b>Shock Resistance</b>	MIL-STD-202G, Method 213B, Test Condition I (100 G's peak for 6 milliseconds; Sawtooth Waveform)
<b>Vibration Resistance</b>	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
<b>Salt Spray Resistance</b>	MIL-STD-202G, Method 101E, Test condition B (48 hrs).
<b>Insulation Resistance</b>	MIL-STD-202G, Method 302, Test Condition A (After Opening) 10,000 ohms minimum.
<b>Solderability</b>	MIL-STD-202G, Method 208H
<b>Resistance to solder Heat</b>	MIL-STD-202G Method 210F, Test Condition B. (260+/-5°C, 10+/-1 sec)
<b>Thermal Shock</b>	MIL-STD-202G, Method 107G, Test Condition B (-65°C to +125°C).
<b>Operating Temperature</b>	-55°C to +125°C
<b>Terminal Strength</b>	IEC-68-2-21

## Mechanical Dimensions



## Ordering Information



\* Ratings 5A and less have 0.032" diameter lead;  
Ratings 6A and above have 0.040" diameter lead.

Specifications subject to change without notice

## Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code	Inside Tape Spacing
Bulk	N/A	100	33 / 32	N/A
Bulk (Pigtail Type)	N/A	500	33 / 32	N/A
Tape & Reel, 10 mm Pitch	EIA-296-F	1000	73 / 72	73

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