

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

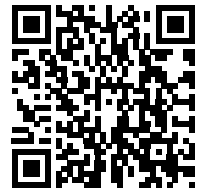
Part Number: 3SB 12-R
Manufacturer: Bel Fuse Inc.
Package: Bulk
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/bel-fuse-inc/3sb-12-r.html>

Request a Quote:

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Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

Type 3SB

Slow Blow Fuse Series

HF Pb 3SB Series, 6x32mm Glass Tube Slow Blow Fuse

RoHS Compliant

Description

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

Features

- Meet UL standard 248-14
- Wide operating temperature range
- Bulk packing available
- Full compliance with EU Directive 2011/65/EU and amending directive 2015/863
- Halogen Free
- Lead Free

Applications

Provide individual protection for components or internal circuits.

- Power supplies
- Battery charger
- Monitor
- Adapter

LEAD FREE = Pb

HALOGEN FREE = HF



Physical Specifications

Materials	Body : Glass
	Cap : Nickel Plated Brass Caps
	Leads : Matte Tin Plated Copper
Marking	On Fuse :
	"bel", "3SB", "Current Rating", "Voltage Rating",
	"Appropriate Safety Logos", "✓" (RoHS compliant)
	On Label :
	"bel", "3SB", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and "✓", "RoHS" (China RoHS compliant).

Electrical Characteristics

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	Ampere Rating/ Voltage Rating	Ampere Range / Volt @ I.R. ability*
UL US	E506667	500mA-8A/ 250V AC 8.1A-15A/ 125V AC	500mA-8A/125V AC@10,000A 500mA-8A/250V AC@200A 8.1A-15A/125V AC@10,000A

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

Environmental Specifications

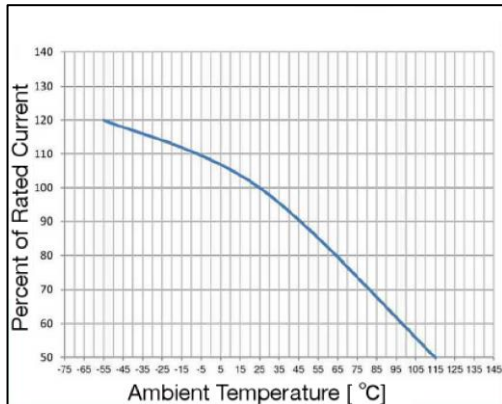
Shock Resistance	MIL-STD-202G, Method 213B, Test Condition 1 (100 G's peak for 6 milliseconds; Sawtooth waveform)
Vibration Resistance	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test Condition B (48 hrs).
Insulation Resistance	MIL-STD-202G, 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 B (260+/-5°C, 10+/-1 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65°C to +125°C).
Operating Temperature	-55°C to +125°C
Terminal Strength	IEC-68-2-21

Electrical Specifications

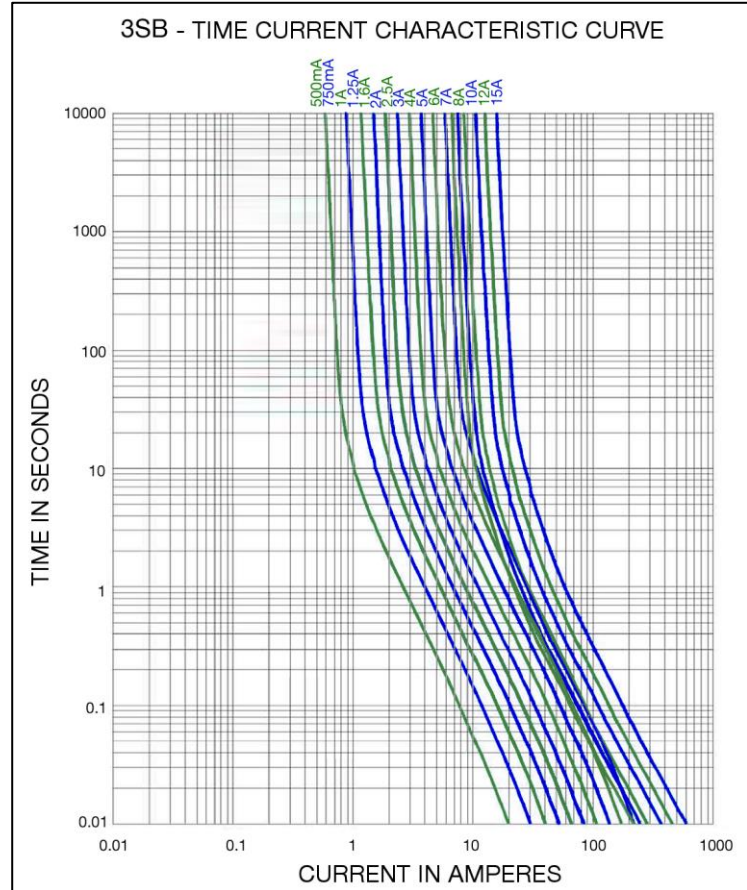
Catalog Number	Ampere Rating	Typical Cold Resistance (ohms)	Volt-drop @100%In (Volt) max.	Voltage and Interrupting Ratings	Melting I ² T <10 mSec (A ² Sec)	Melting I ² T @10 In (A ² Sec)	Maximum Power Dissipation (W)	Agency Approvals
3SB 500-R	500mA	1.38	1.07	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	4.4	5.4	0.8	Y
3SB 750-R	750mA	0.642	0.68		9	10	0.8	Y
3SB 1-R	1A	0.374	0.59		16	21	0.9	Y
3SB 1.25-R	1.25A	0.248	0.43		25	32	0.9	Y
3SB 1.6-R	1.6A	0.155	0.38		39	50	1.0	Y
3SB 2-R	2A	0.115	0.36		61	79	1.0	Y
3SB 2.5-R	2.5A	0.079	0.29		94	123	1.1	Y
3SB 3-R	3A	0.058	0.27		146	192	1.1	Y
3SB 4-R	4A	0.039	0.23		226	300	1.2	Y
3SB 5-R	5A	0.029	0.22		349	469	1.3	Y
3SB 6-R	6A	0.018	0.19		286	455	1.6	Y
3SB 7-R	7A	0.016	0.18		372	592	1.8	Y
3SB 8-R	8A	0.013	0.17		483	769	1.9	Y
3SB 10-R	10A	0.010	0.17		817	1300	2.3	Y
3SB 12-R	12A	0.008	0.15		1277	2031	2.6	Y
3SB 15-R	15A	0.006	0.15		2123	3377	3.0	Y

Consult manufacturer for other ratings

Temperature Derating Curve

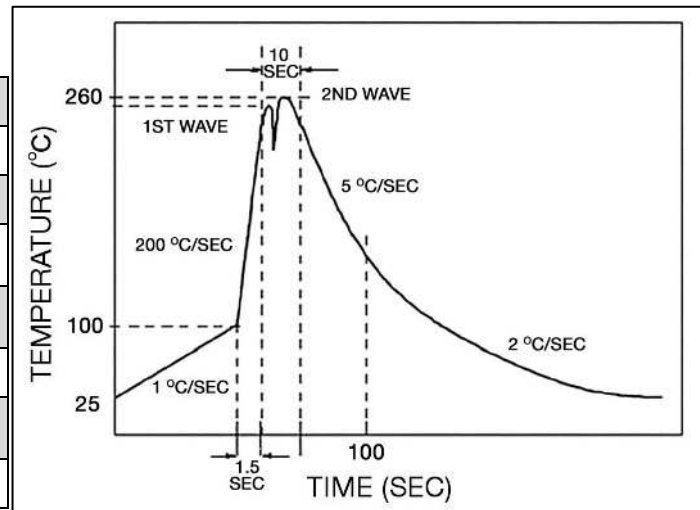


Average Time Current Curve



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



Type 3SB

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3SB(P) Fuse FGNO Explanation

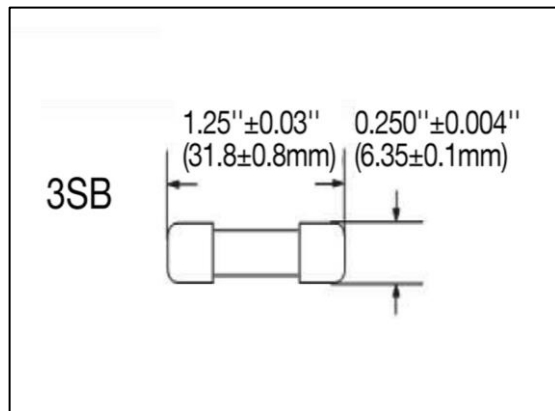
06X2 R [XXXX] -XX

0602R=3SB; [XXX1]=Ampere Rating; XX=See Ordering Information as below

Catalog number	FGNO / Order Number
3SB 500-R	0602R0501-33
3SB 750-R	0602R0751-33

Catalog number	FGNO / Order Number
3SB 1-R	0602R1001-33
3SB 1.25-R	0602R1251-33
3SB 1.6-R	0602R1601-33
3SB 2-R	0602R2001-33
3SB 2.5-R	0602R2501-33
3SB 3-R	0602R3001-33
3SB 4-R	0602R4001-33
3SB 5-R	0602R5001-33
3SB 6-R	0602R6001-33
3SB 7-R	0602R7001-33
3SB 8-R	0602R8001-33
3SB 10-R	0602R9101-32
3SB 12-R	0602R9121-32
3SB 15-R	0602R9151-32

Mechanical Dimensions



Ordering Information

06X2 R XXX1 - X X

FUSE TYPE _____
0602R = 3SB Series

R = RoHS Compliant _____

AMPERE RATING _____
Refer to fuse FGNO explanation table

PACKAGING CODE _____
3 = 3SB, Cartridge, 1K / Box

VOLTAGE CODE _____
2 = 125V, for 8.1A-15A
3 = 250V, for 500mA-8A

Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code	Inside Tape Spacing
Bulk	N/A	1000	32 / 33	N/A