SB3100L

LOW VF SCHOTTKY BARRIER RECTIFIERS

| VOLTAGE | 100 Volt | CURRENT | 3 Ampere |

DO-201AD
Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory
  Flammability Classification 94V-O utilizing
  Flame Retardant Epoxy Molding Compound.
- For use in low voltage, high frequency inverters, free wheeling,
  and polarity protection applications .
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case: DO-201AD Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode
- Weight: 0.04 ounces, 1.142 grams

1 Cathode   2 Anode
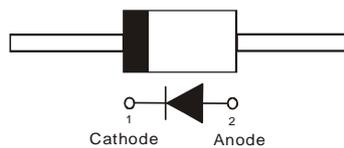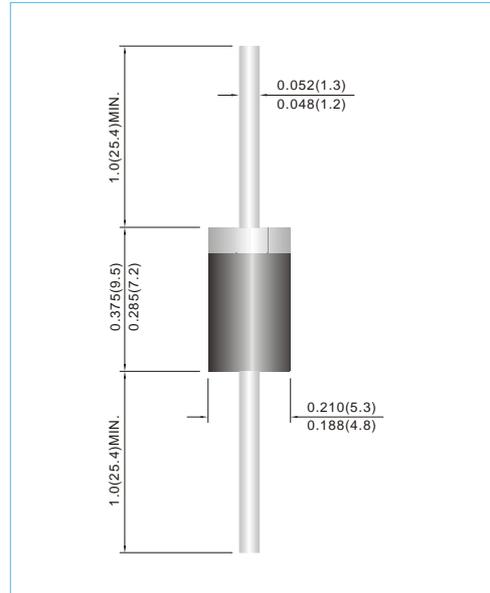
MAXIMUM RATINGS (T$_A$=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V$_{RRM}$	100	V
Maximum rms voltage	V$_{RMS}$	70	V
Maximum average forward rectified current	I$_{F(AV)}$	3	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I$_{FSM}$	200	A
Typical thermal resistance	R$_{\Theta JA}$	45	°C/W
Operating junction temperature range	T$_J$	-55 to + 150	°C
Storage temperature range	T$_{STG}$	-55 to + 150	°C

ELECTRCIAL CHARACTERISTICS (T$_A$=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		TYP.	MAX.	UNIT
Breakdown voltage	V$_{BR}$	I$_R$=0.5mA		100	-	V
Instantaneous forward voltage	V$_F$	I$_F$=1A I$_F$=3A	T$_A$=25°C	0.50 0.68	- 0.74	V
		I$_F$=1A I$_F$=3A	T$_A$=125°C	0.42 0.56	- 0.6	V
Reverse current	I$_R$	V$_R$=70V		4	-	μA
		V$_R$=100V	T$_A$=25°C T$_A$=125°C	- -	50 50	μA mA
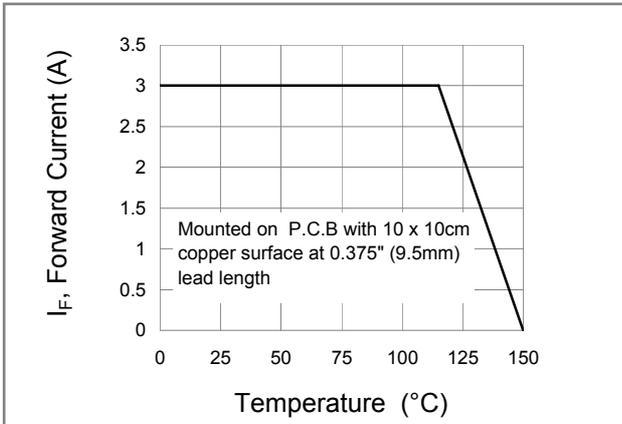
Fig.1 Forward Current Derating Curve

I$_F$, Forward Current (A)

Temperature (°C)

Mounted on P.C.B with 10 x 10cm copper surface at 0.375" (9.5mm) lead length
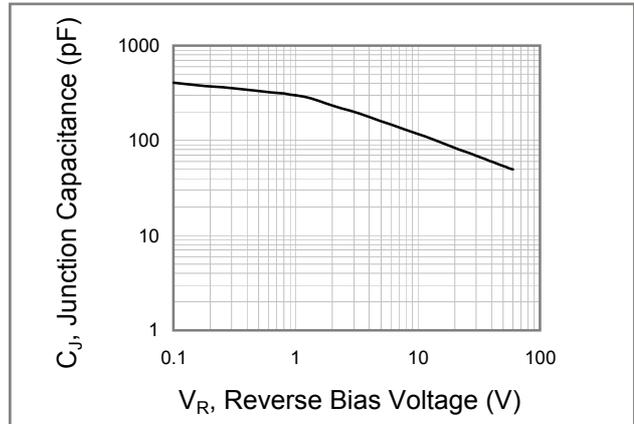
Fig.2 Typical Junction Capacitance

C$_J$, Junction Capacitance (pF)

V$_R$, Reverse Bias Voltage (V)
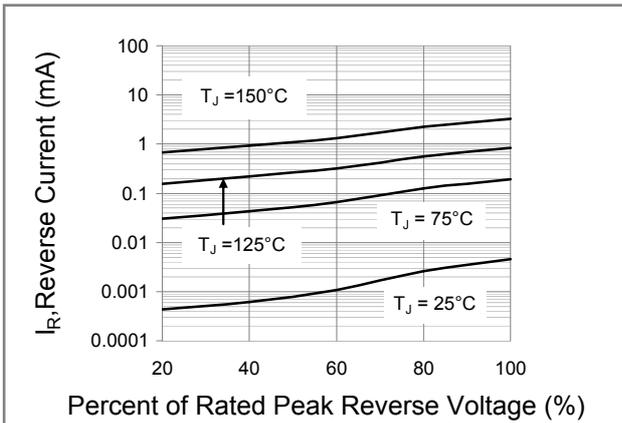
Fig.3 Typical Reverse Characteristics

I$_R$, Reverse Current (mA)

Percent of Rated Peak Reverse Voltage (%)

T$_J$ =150°C

T$_J$ =125°C

T$_J$ = 75°C

T$_J$ = 25°C
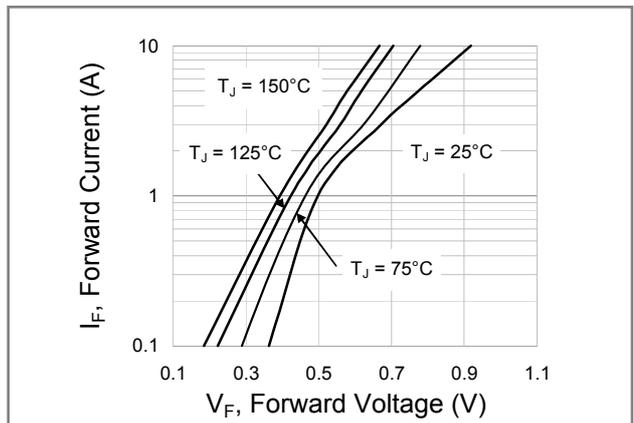
Fig.4 Typical Forward Characteristics

I$_F$, Forward Current (A)

V$_F$, Forward Voltage (V)

T$_J$ = 150°C

T$_J$ = 125°C

T$_J$ = 25°C

T$_J$ = 75°C

Fig.5 Operating Temperature Derating Curve

Reverse Voltage (V)

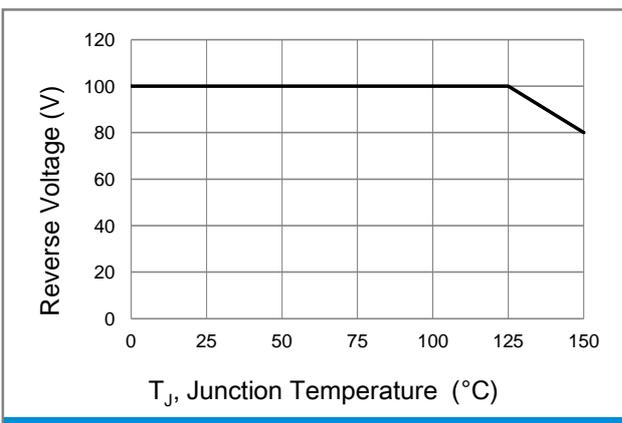T$_J$, Junction Temperature (°C)

SB3100L

Part No_packing code_Version

SB3100L_AY_00001
SB3100L_AY_10001
SB3100L_B0_00001
SB3100L_B0_10001
SB3100L_R2_00001
SB3100L_R2_10001

For example :

RB500V-40_R2_00001

Part No.

- Serial number
- Version code means HF
- Packing size code means 13"
- Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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