

SB320 thru SB3100

Schottky Barrier Rectifiers

Reverse Voltage 20 to 100V Forward Current 3.0A

Feature & Dimensions

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss, high efficiency
- * For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- * Guarding for over voltage protection
- * High temperature soldering guaranteed: 260°C/10 seconds at terminals

2. Mechanical Data

Case: JEDEC DO-201AD, molded plastic over glass body

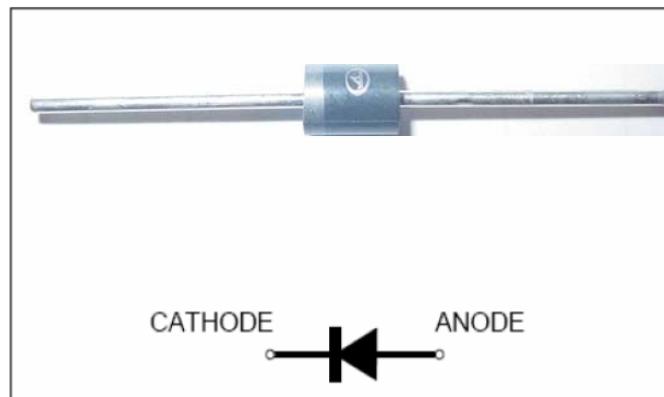
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.038oz., 1.03 g

Handling precaution: None



We declare that the material of product compliance with ROHS requirements

1. Maximum & Thermal Characteristics Ratings

at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SB320	SB330	SB340	SB350	SB360	SB380	SB390	SB3100	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	90	100	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	IF(AV)	3.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80								A
Typical thermal resistance (Note 1)	R _{θJA}	50								°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-40 to +150								°C

Electrical Characteristics Ratings

at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SB320	SB330	SB340	SB350	SB360	SB380	SB390	SB3100	Unit
Maximum instantaneous forward voltage at 3.0A	V _F	0.50		0.70		0.84				V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 100°C	IR	0.5		20						mA
Typical junction capacitance at 4.0V, 1MHz	C _J	250								PF

NOTES:

- Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

SB320 thru SB3100

2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

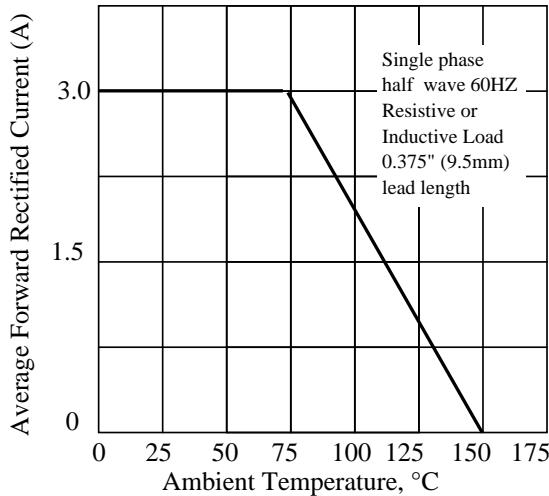


Fig 3. - Typical Instantaneous Forward Characteristics

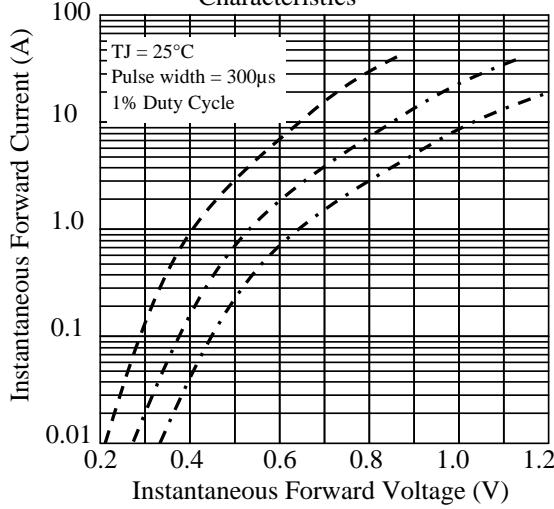


Fig 5. - typical transient thermal impedance

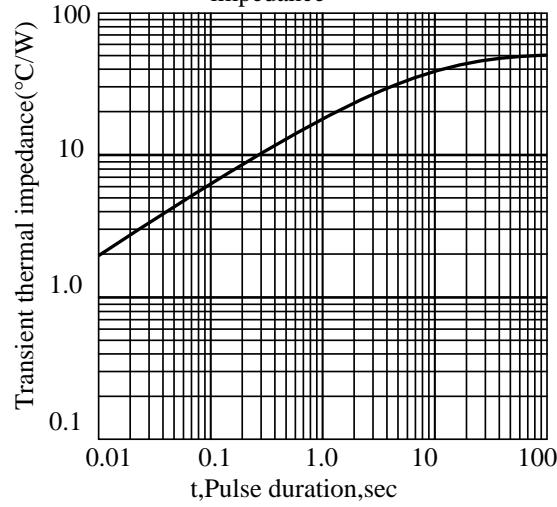


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

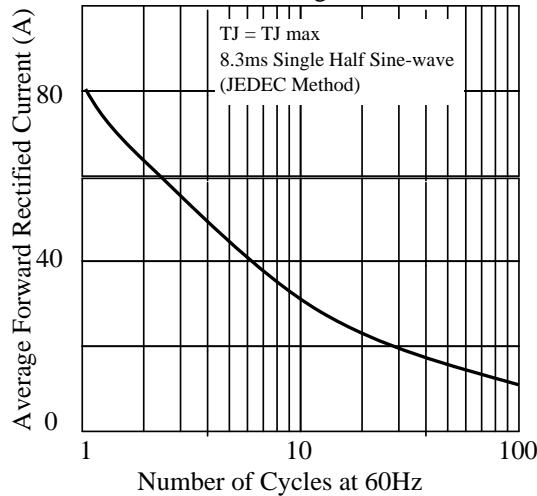


Fig 4. - Typical Reverse Characteristics

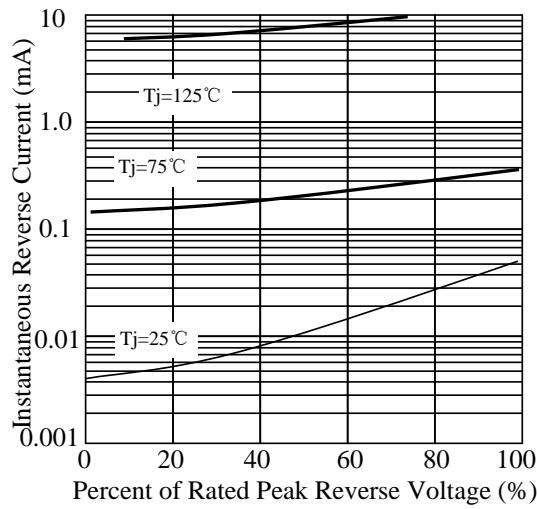
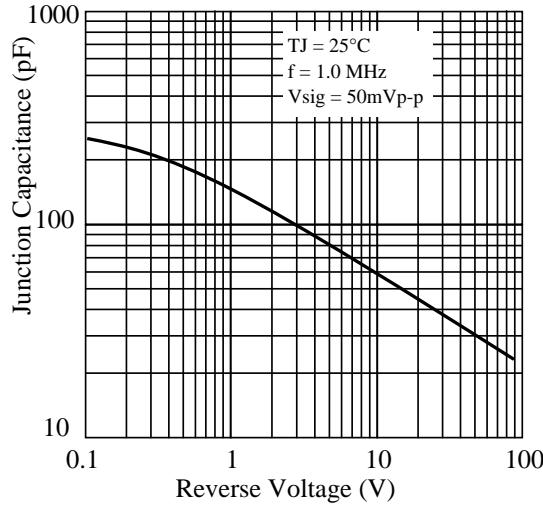


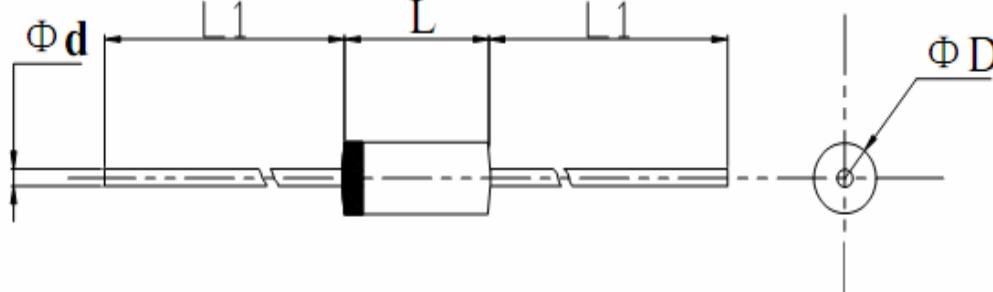
Fig 6. - Typical Junction Capacitance



SB320 thru SB3100

3. dimension:

Package outline



Dimensions					Note: DO-201AD molded plastic case The marking band indicates the cathode
	inches		mm		
	Min.	Max.	Min.	Max.	
L	0.335	0.375	8.5	9.5	
L1	1.0	-	25.4	-	
ΦD	0.197	0.220	5.0	5.6	
Φd	0.048	0.052	1.2	1.3	

SB320 thru SB3100**4. Update Record**

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2010-9-26



电子元器件线上授权代理开拓者
原厂授权 · 正品现货 · 一件即发

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)