



# SB320~SB3100

## SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 20 to 100 Volts **CURRENT** 3.0 Amperes

### FEATURES

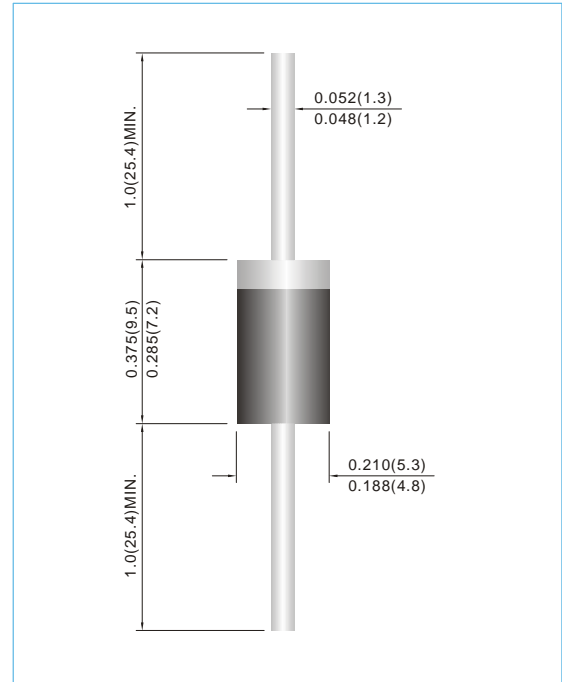
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: DO-201AD Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.0395 ounces, 1.122 grams

### DO-201AD

Unit : inch(mm)



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	SB320	SB330	SB340	SB350	SB360	SB380	SB3100	UNITS	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V	
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	V	
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V	
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	3.0							A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	80							A	
Maximum Forward Voltage at 3.0A (Note 3)	$V_F$	0.5			0.75		0.85		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$	$I_R$	0.2 30			0.1 30		0.5 30		mA	
Typical Thermal Resistance (Note 2) (Note 1) (Note 1)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	50 12 15								$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +125			-55 to +150				$^\circ\text{C}$	

#### Notes :

1. Measured at ambient temperature at a distance of 9.5mm from the case
2. Minimum Pad Area
3. Pulse test : 300μs pulse width , 1% duty cycle



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## RATING AND CHARACTERISTIC CURVES

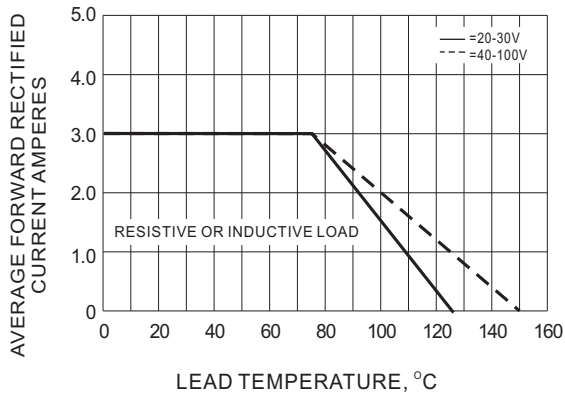


Fig.1- FORWARD CURRENT DERATING CURVE

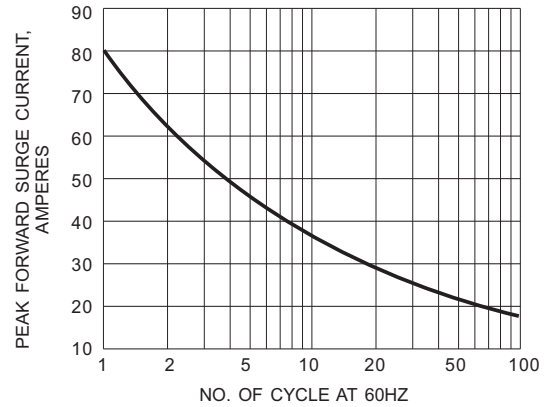


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

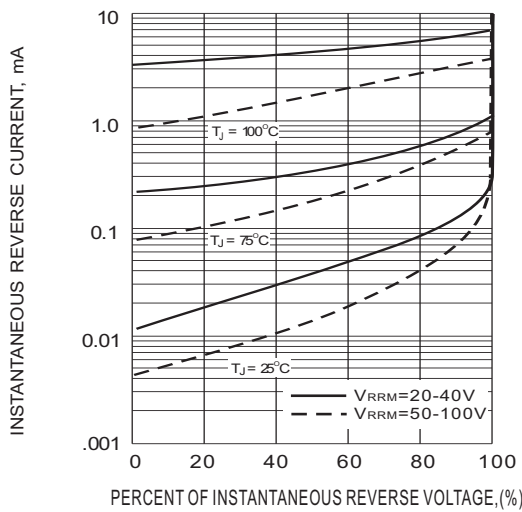


Fig.3- TYPICAL REVERSE CHARACTERISTICS

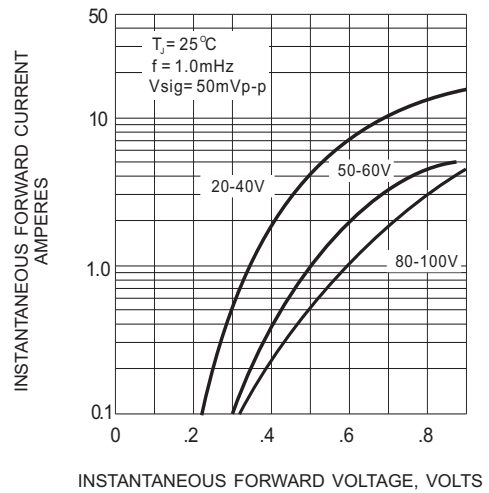


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS