



# SB320 thru SB360

Schottky Barrier Rectifiers  
Reverse Voltage 20 to 60 Volts    Forward Current 3.0 Amperes

## Features

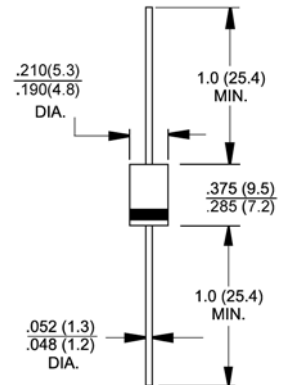
- ◆ Metal-Semiconductor junction with guard ring
- ◆ Epitaxial construction
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ The plastic material carries UL recognition 94V-0
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



**DO-201AD**

## Mechanical Data

- ◆ Case : JEDEC DO-201AD molded plastic
- ◆ Polarity : Color band denotes cathode
- ◆ Weight : 0.041 ounce, 1.15 grams
- ◆ Mounting position : Any



**Dimensions in inches and (millimeters)**

## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbols	SB320	SB330	SB340	SB350	SB360	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	Volts
Maximum average forward rectified current .375" (9.5mm) lead lengths (See Fig.1)	$I_{AV}$	3.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100.0					Amps
Maximum forward voltage at 3.0A DC	$V_F$	0.50			0.74		Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$	@ $T_J=25^\circ\text{C}$ @ $T_J=100^\circ\text{C}$			0.5 20.0		mA
Typical thermal resistance (Note 1)	$R_{\theta JL}$	20			10		°C/W
Typical junction capacitance (Note 2)	$C_J$	250					pF
Operating junction temperature range	$T_J$	-55 to +125					°C
Storage temperature range	$T_{STG}$	-55 to +150					°C

- Notes:**
1. Thermal Resistance Junction to Lead.
  2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

# RATINGS AND CHARACTERISTIC CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

