

# SB320 THRU SB3100

## 3 AMPERE SCHOTTKY BARRIER RECTIFIERS VOLTAGE - 20 to 100 Volts CURRENT - 3.0 Amperes

### DO-201AD

#### FEATURES

- High surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Void-free plastic in a DO-201AD package
- High current operation 3.0 ampere at  $T_L=75\text{ }^{\circ}\text{C}$
- Exceeds environmental standards of MIL-S-19500/228

#### MECHANICAL DATA

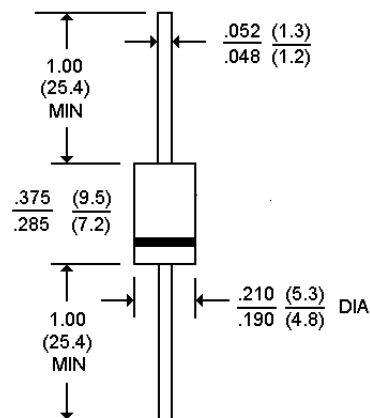
Case: Molded plastic, DO-201AD

Terminals: Axial leads, solderable per MIL-STD-202,  
Method 208

Polarity: Color band denotes cathode

Mounting Position: Any

Weight: 0.04 ounce, 1.1 grams



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

\*At  $T_A=25\text{ }^{\circ}\text{C}$  unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

\*\*All values except Maximum RMS Voltage are registered JEDEC parameters.

	SB320	SB330	SB340	SB350	SB360	SB380	SB3100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	26	35	42	56	80	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at 75 $^{\circ}\text{C}$	3.0							A
Maximum Overload Surge Current at 1 cycle	80							A
Maximum Forward Voltage at 3.0A DC	0.50		0.75		0.85			V
Maximum Full Load Reverse Current, Full Cycle Average at 25 $^{\circ}\text{C}$	0.5							mADC
Maximum DC Reverse Current at Rated DC Reverse Voltage and 100 $^{\circ}\text{C}$	30							mADC
Typical Junction capacitance (Note 1)	180							pF
Typical Thermal Resistance (Note 2) R $\theta_{\text{KJA}}$	40.0							$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	-50 TO +125							$^{\circ}\text{C}$

#### NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Thermal Resistance Junction to Ambient

# RATING AND CHARACTERISTIC CURVES

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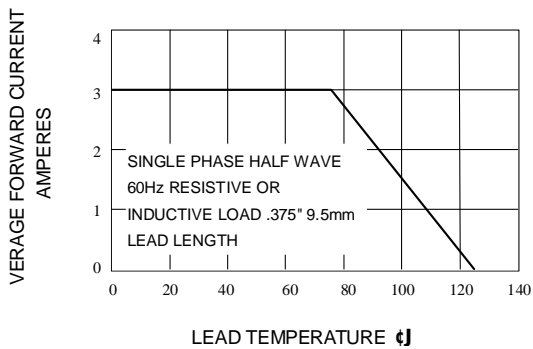


Fig. 1-FORWARD CURRENT DERATING CURVE

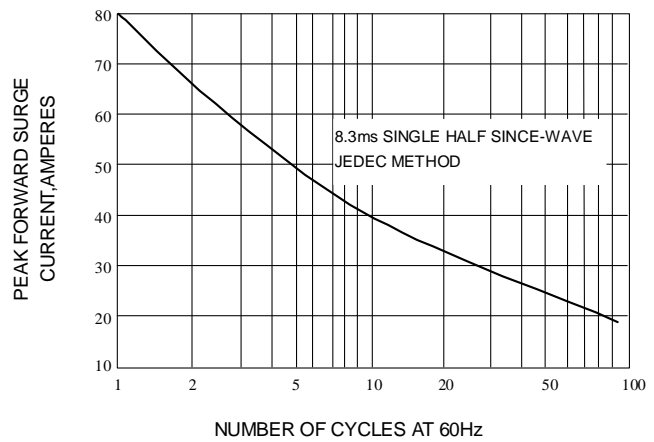


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

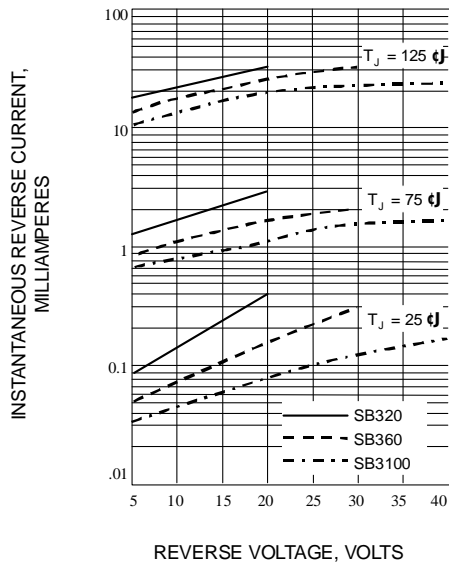


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

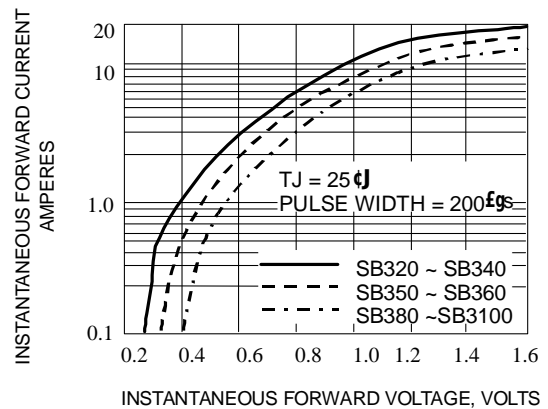


Fig. 4-TYPICAL FORWARD CHARACTERISTICS

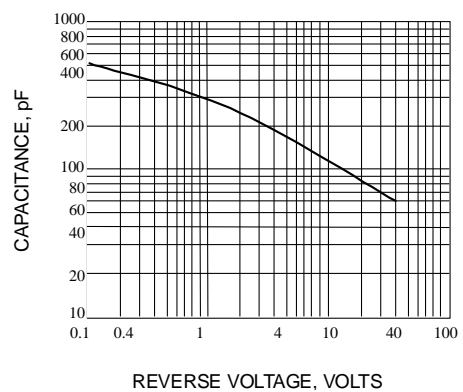


Fig. 5-TYPICAL JUNCTION CAPACITANCE