

# 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

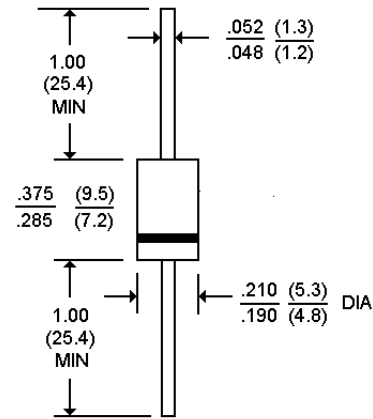
Case: Molded plastic, DO-201AD

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 ºC	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 ºC	0.5							mADC
Maximum DC Reverse Current at Rated DC Reverse Voltage and 100 ºC	30							mADC
Typical Junction capacitance (Note 1)	180							pF
Typical Thermal Resistance (Note 2) R θJA	40.0							ºC/W
Operating and Storage Temperature Range	-50 TO +125							ºC

#### NOTES:

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

## RATING AND CHARACTERISTIC CURVES

### SB320 THRU SB3100

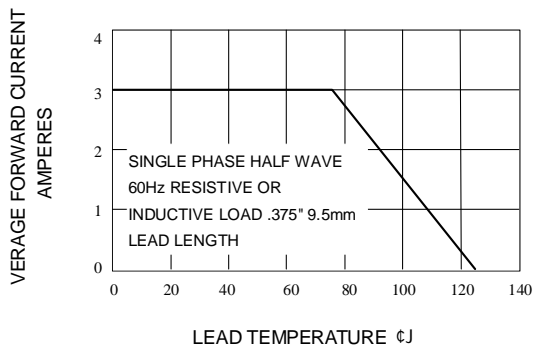


Fig. 1-FORWARD CURRENT DERATING CURVE

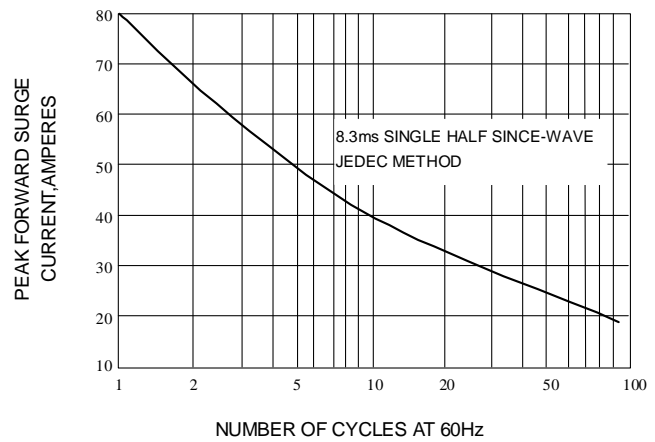


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

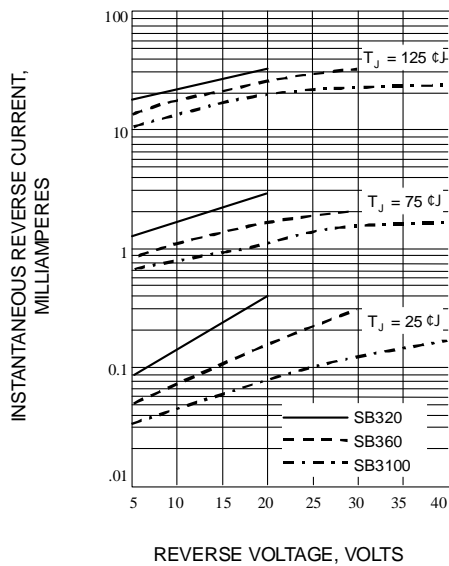


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

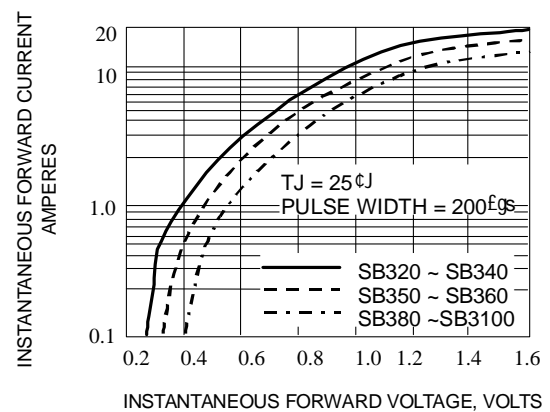


Fig. 4-TYPICAL FORWARD CHARACTERISTICS

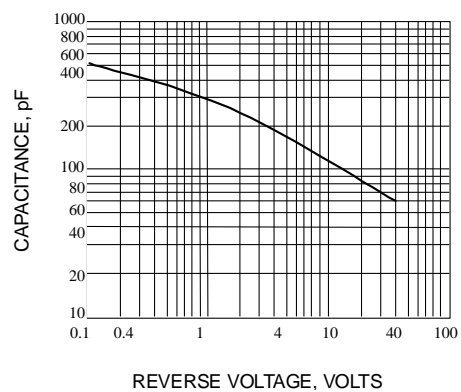


Fig. 5-TYPICAL JUNCTION CAPACITANCE