



# SB520H thru SB5150H

## SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 20 to 150 Volts **CURRENT** 5 Amperes

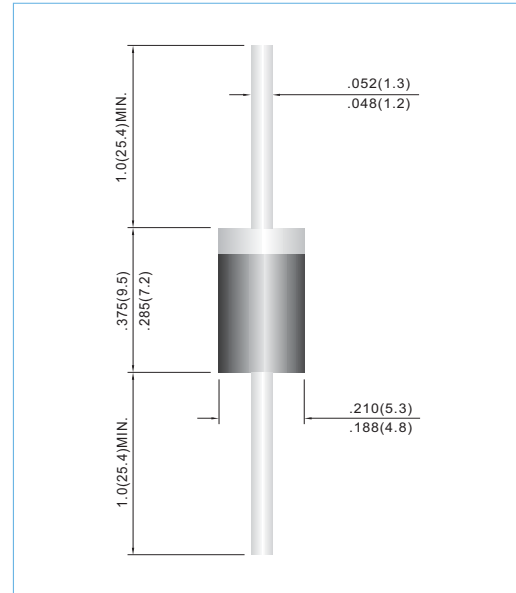
**DO-201AD** Unit: inch(mm)

### 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 .
- Pb free product : 99% Sn above can meet RoHS environment substance directive request

### 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: 0.04 ounces, 1.1 grams



### 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	SB520H	SB530H	SB540H	SB550H	SB560H	SB580H	SB5100H	SB5150H	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	150	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_A=60^\circ\text{C}$	$I_{F(AV)}$	5								A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	150								A
Maximum Forward Voltage at 5.0A	$V_F$	0.55		0.70		0.85		0.92		V
Maximum DC Reverse Current $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J=100^\circ\text{C}$	$I_R$	0.5				50				mA
Maximum Thermal Resistance (Note 1)	$R_{\theta JL}$	15			10					$^\circ\text{C} / \text{W}$
Operating Junction Temperature Range	$T_J$	-50 to +150								$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-50 to +150								$^\circ\text{C}$

NOTES:

1. Thermal Resistance Junction to Lead Vertical PC Board Mounting .375" (9.5mm) Lead Lengths.



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## RATING AND CHARACTERISTIC CURVES

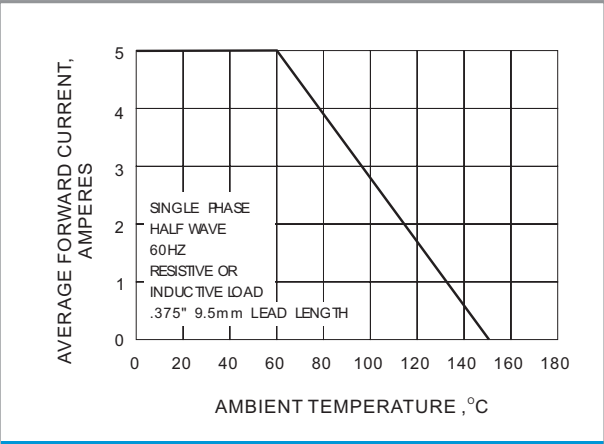


Fig. 1- FORWARD CURRENT DERATING CURVE

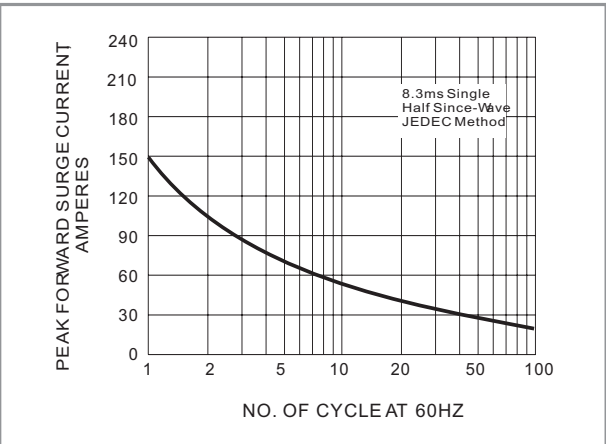


Fig. 2- TMAXIMUM NON - REPETITIVE SURGE CURRENT

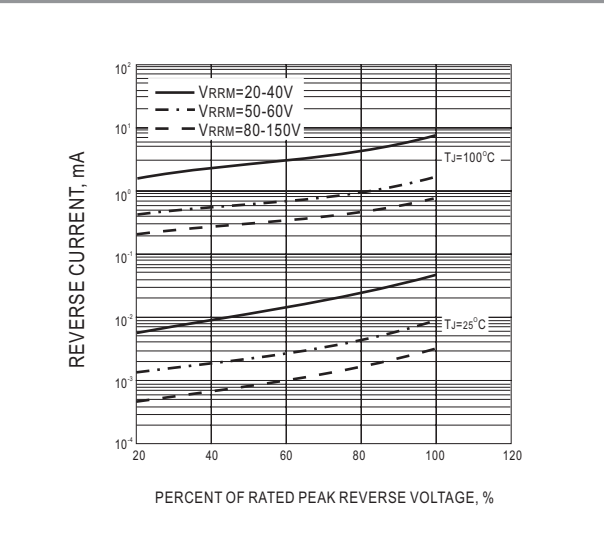


Fig. 3- TYPICAL REVERSE CHARACTERISTIC

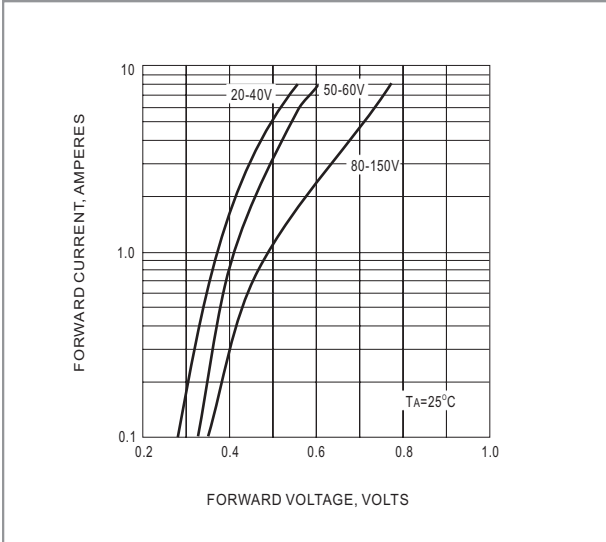


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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