



SB320E~SB360E

SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 60 Volts **CURRENT** 3.0 Amperes

DO-201AD

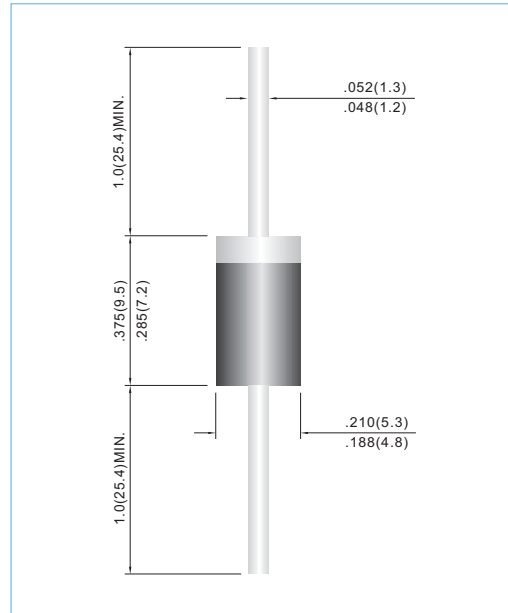
Unit: inch(mm)

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 .
- In compliance with EU RoHS 2002/95/EC directives
- ESD Passed devices : Air mode 15KV ,human body mode 8KV

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



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	SB320E	SB330E	SB340E	SB350E	SB360E	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	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 2)	V_F	0.5			0.75		V
Maximum DC Reverse Current $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J = 100^\circ\text{C}$	I_R	0.2 30			0.1 30		mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	20					$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +125		-55 to +150			$^\circ\text{C}$

Note : 1. Measured at ambient temperature at a distance of 9.5mm from the case.

2. Pulse test : 300μs pulse width, 1% duty cycle.



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RATING AND CHARACTERISTIC CURVES

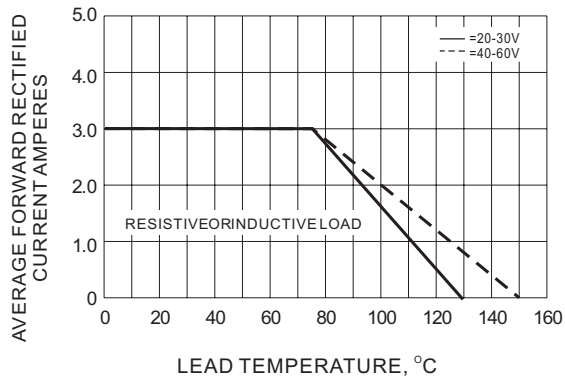


Fig.1- FORWARD CURRENT DERATING CURVE

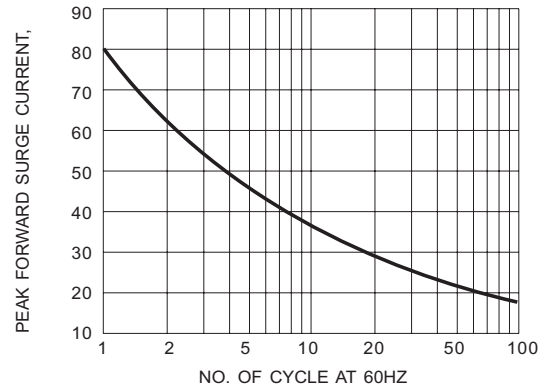


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

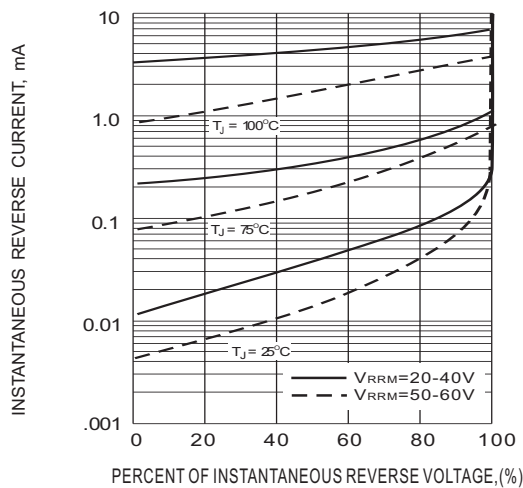


Fig.3- TYPICAL REVERSE CHARACTERISTICS

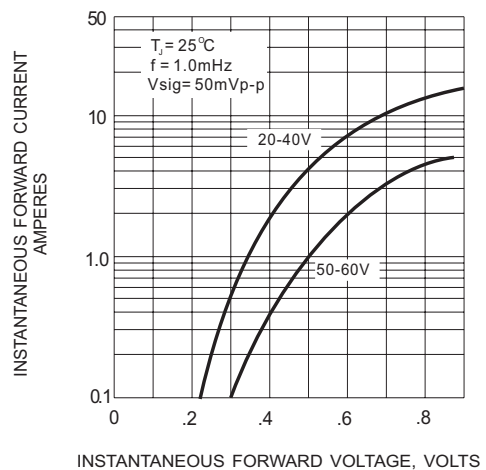


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS