

**SB5T100**

**5.0AMPS. SCHOTTKY BARRIER RECTIFIERS**

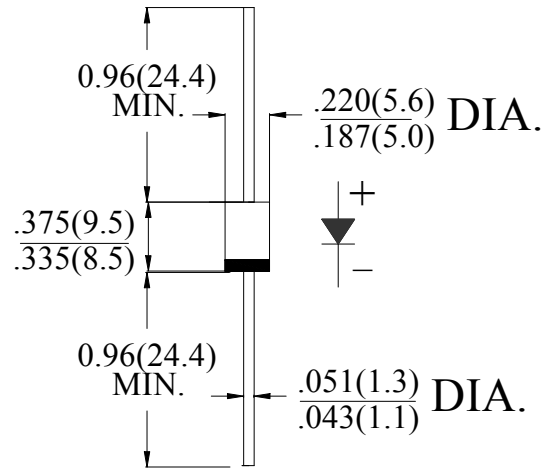
**FEATURE**

- . For surface mounted application
- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge current capability
- . High temperature soldering guaranteed:  
260°C/10 seconds at terminals.

**MECHANICAL DATA**

- . Terminal: Solder plated
- . Case: Molded with UL-94 Class V-0 recognized  
Flame Retardant Epoxy (free halogen)
- . Polarity: color band denotes cathode
- . Mounting position: any

**DO-27/DO-201AD**



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%

Type Number	SYM BOL	SB5T100	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS Voltage	$V_{RMS}$	70	V
Maximum DC blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current at $T_L = 90^\circ C$	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	100	A
Maximum Forward Voltage @ $T_A = 25^\circ C$ at 5.0A DC	$V_{F(MAX)}$	0.6	V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ at rated DC blocking voltage @ $T_A = 100^\circ C$	$I_R$	0.1 10.0	mA
Typical Junction Capacitance (Note1)	$C_J$	460	pF
Typical Thermal Resistance (Note2)	$R_{(JA)}$	65	$^\circ C/W$
	$R_{(JC)}$	15	$^\circ C/W$
Storage Temperature	$T_{STG}$	-55 to +150	$^\circ C$
Operating Junction Temperature	$T_J$	-55 to +150	$^\circ C$

**Note:**

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Measured on P.C.Board with 0.2×0.2”(5.0×5.0mm)Copper Pad Areas.

**RATING AND CHARACTERISTIC CURVES (SB5T100)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

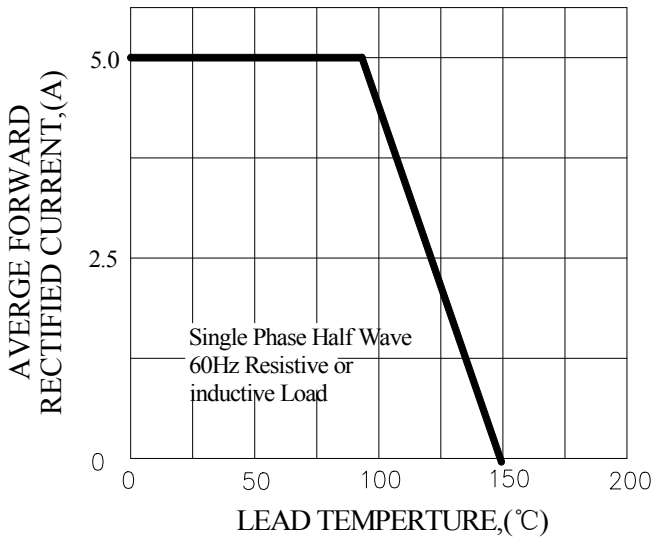


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

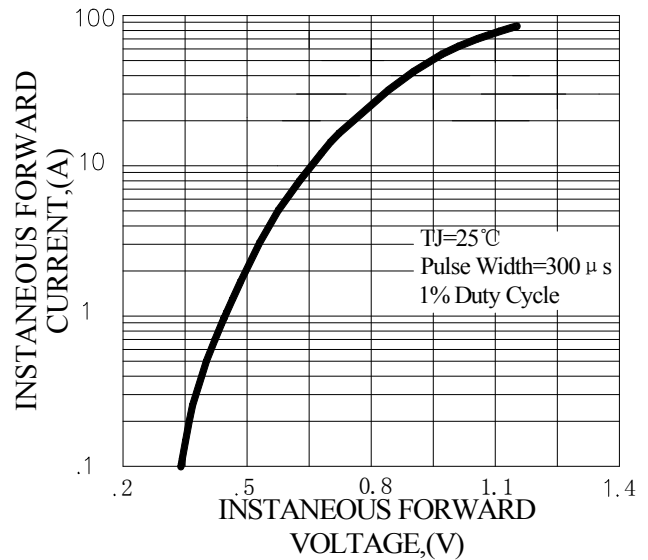


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

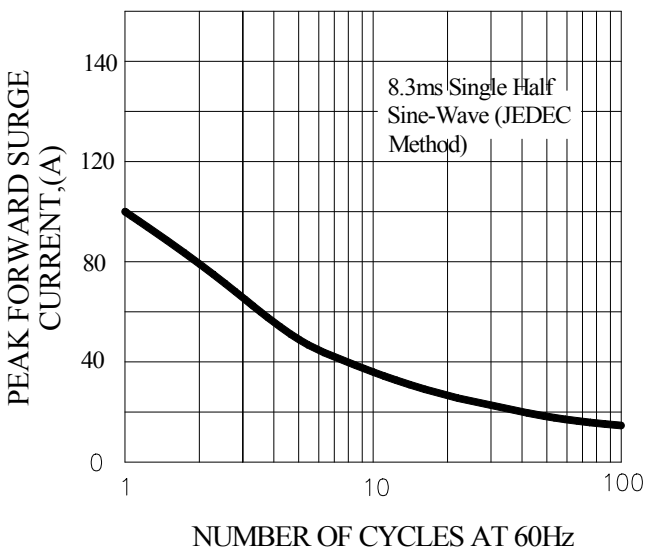


FIG.4-TYPICAL REVERSE CHARACTERISTICS

