

## SB3T80

### 3.0AMPS. SCHOTTKY BARRIER RECTIFIERS

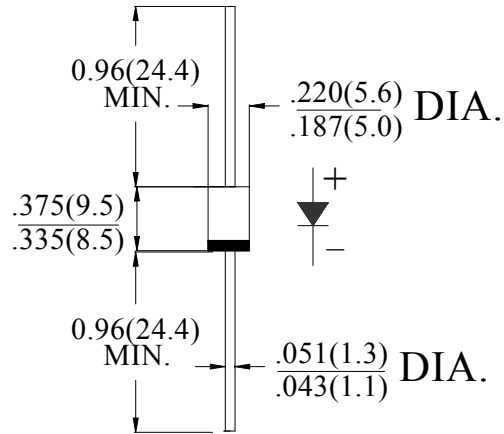
#### FEATURE

- . 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

#### 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	SB3T80	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	80	V
Maximum RMS Voltage	$V_{RMS}$	56	V
Maximum DC blocking Voltage	$V_{DC}$	80	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	80.0	A
Forward Voltage at 3.0A DC	@ $T_A=25^\circ\text{C}$	$V_{F(MAX)}$	0.58
		$V_{F(TYPE)}$	0.52
	@ $T_A=125^\circ\text{C}$	$V_{F(MAX)}$	0.51
Maximum DC Reverse Current at rated DC blocking voltage	@ $T_J=25^\circ\text{C}$	$I_R$	0.1
	@ $T_J=100^\circ\text{C}$		10.0
Typical Junction Capacitance (Note1)	$C_J$	370	pF
Typical Thermal Resistance (Note2)	$R_{(JA)}$	45	°C/W
Storage Temperature	$T_{STG}$	-55 to +150	°C
Operating Junction Temperature	$T_J$	-55 to +150	°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 (SB3T80)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

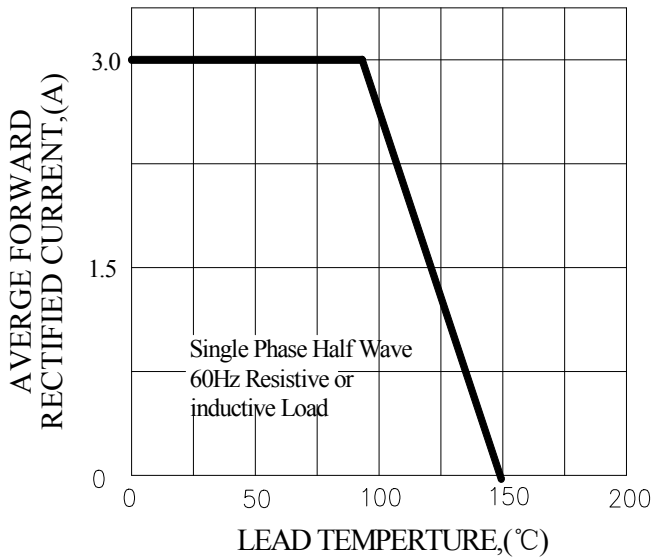


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

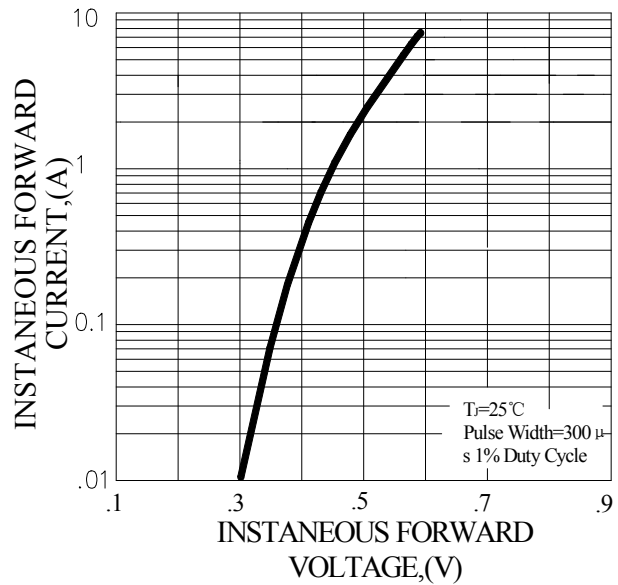


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

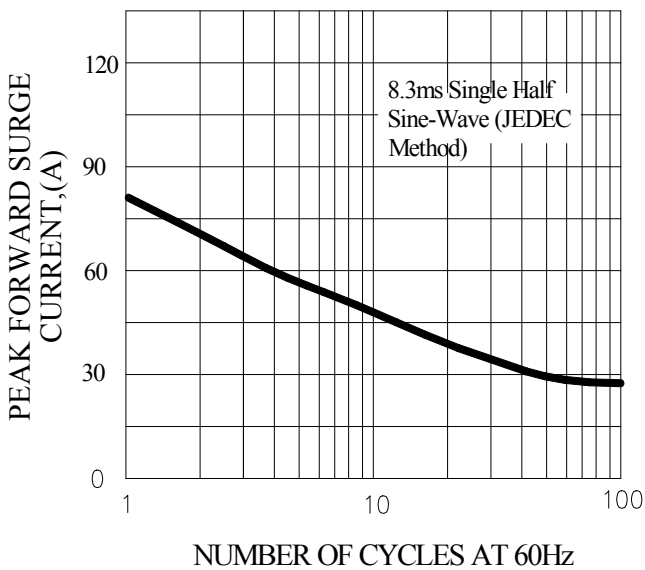
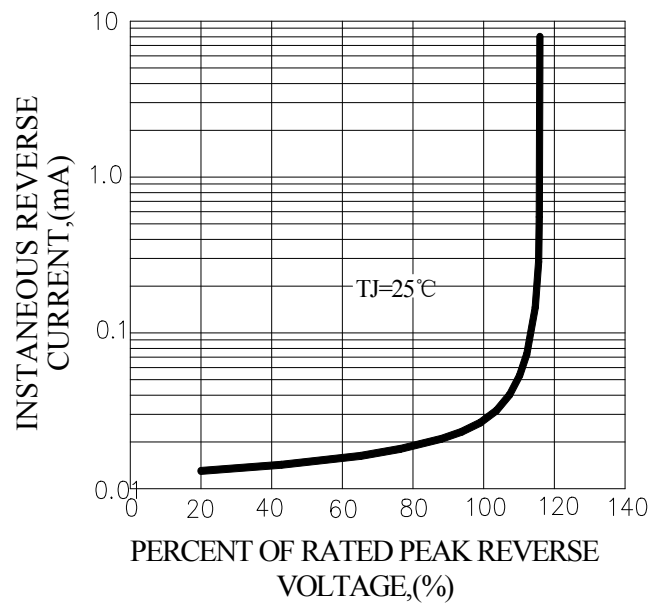
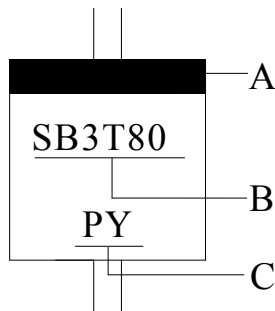


FIG.4-TYPICAL REVERSE CHARACTERISTICS



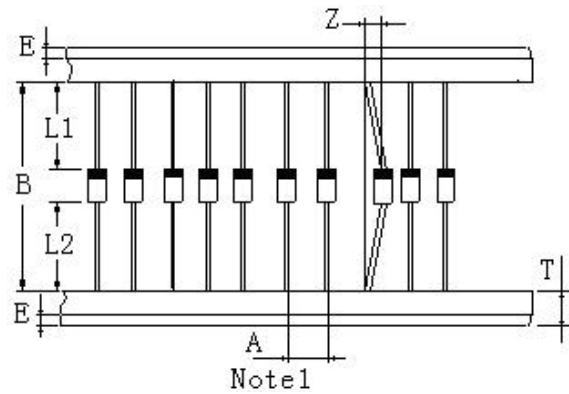
## Marking and packaging illustration

### 1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product Name
C	Trademark

### 2、Packaging



ITEM	SYMBOL	SPECIFICATIONS	
		(mm)	(inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0±0.4	0.236±0.016
Exposed adhesive	E	0.8max	0.032max
Body eccentricity	L1-L2	1.0max	0.040max
Component	A	10.0±0.5	0.4±0.02
Inner tap	B	52.0~53.5	2.05~2.11
NOTE: Each component lead shall be sandwiched between tapes for a minimum of 2.5mm (0.1inch)			