

SB10T80

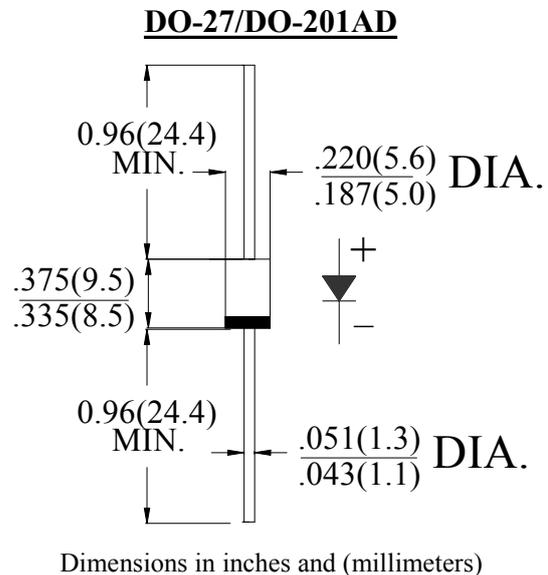
10.0AMPS. TRENCH BARRIER SCHOTTKY RECTIFIERS

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 /10sec/ 0.375" lead length at 5 lbs tension

MECHANICAL DATA

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy(free halogen)
- . Polarity: color band denotes cathode
- . Mounting position: any



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%

Parameter	Symbol	SB10T80	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 at $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	10.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120	A
Maximum Forward Voltage @ 3.0A DC @ 10.0A DC	V_F	0.43 0.68	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 20.0	mA
Typical Junction Capacitance (Note 1)	C_J	300	pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	25	$^\circ\text{C}/\text{W}$
Operation Junction Temperature and Storage Temperature	T_J, T_{STG}	-55 to + 150	$^\circ\text{C}$

Notes:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.375"(9.5mm) lead length, vertical P.C. Board Mounted

RATING AND CHARACTERISTIC CURVES (SB10T80)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

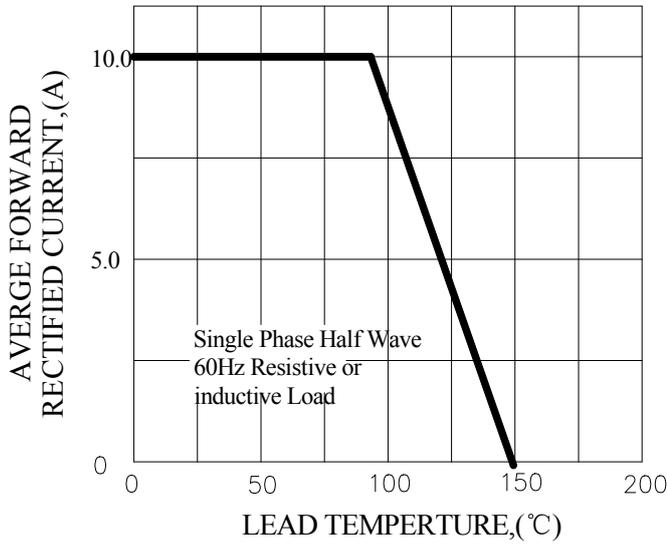


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

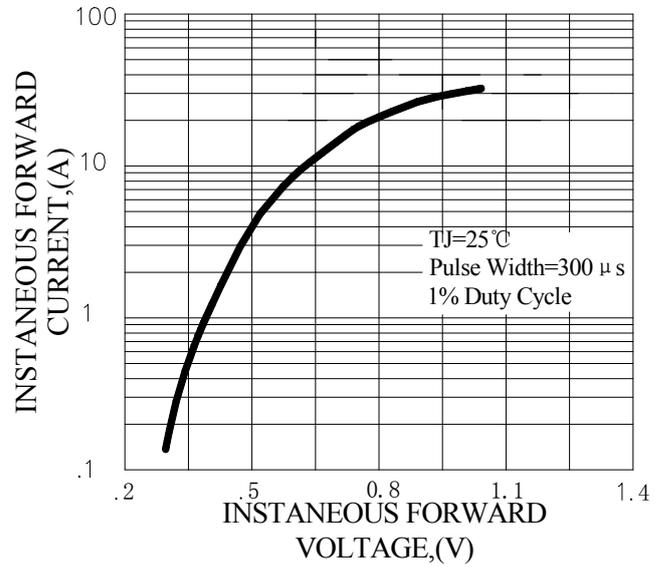


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

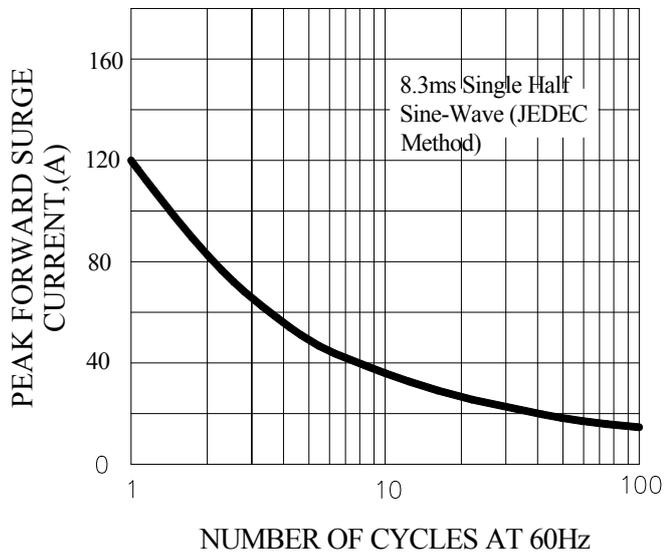
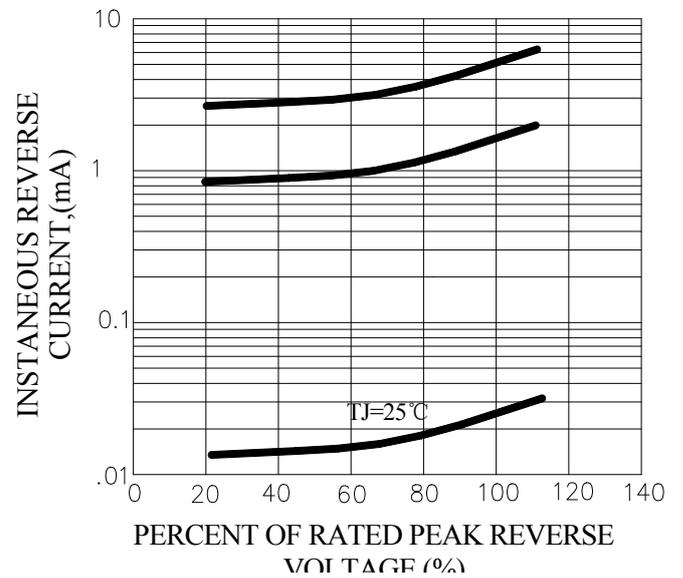
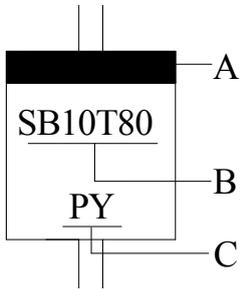


FIG.4-TYPICAL REVERSE CHARACTERISTICS



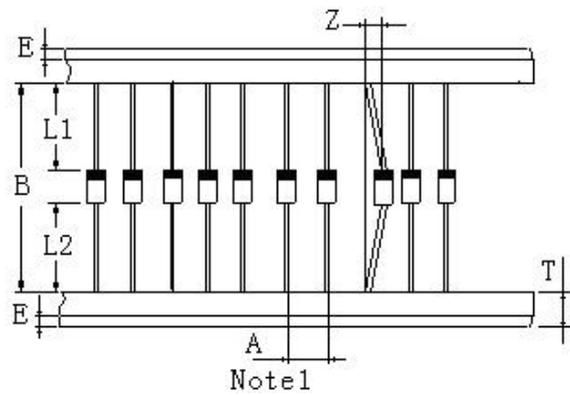
Marking and packaging illustration

1、Marking



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

2、Packaging



ITEM	SYMBOL	SPECIFICATIONS (mm)	SPECIFICATIONS (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)