

SB5T100

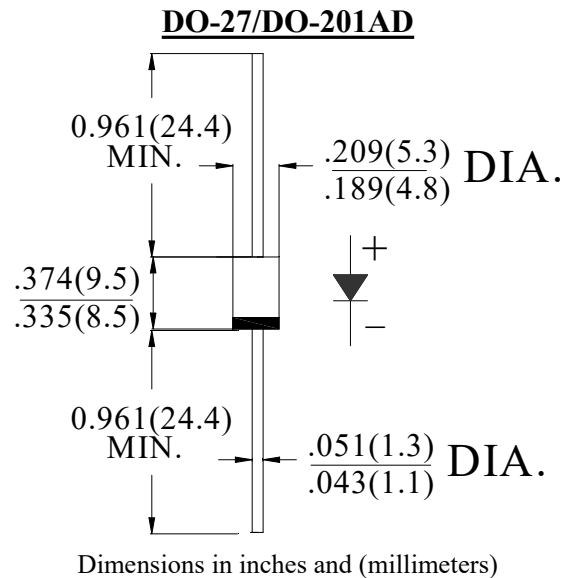
5.0AMPS. SCHOTTKY BARRIER RECTIFIERS

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

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



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	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120	A
Maximum Forward Voltage at 5.0A DC	$V_{F(MAX)}$	0.62	V
	$V_{F(TYP)}$	0.55	
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at rated DC blocking voltage @ $T_J=100^{\circ}C$	I_R	0.1	mA
		10.0	
Typical Junction Capacitance (Note1)	C_J	650	pF
Typical Thermal Resistance (Note2)	$R_{(JL)}$	12	°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. Thermal Resistance from Junction to Ambient at 0.375"(9.5mm)lead length, vertical P.C.Board Mounted

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

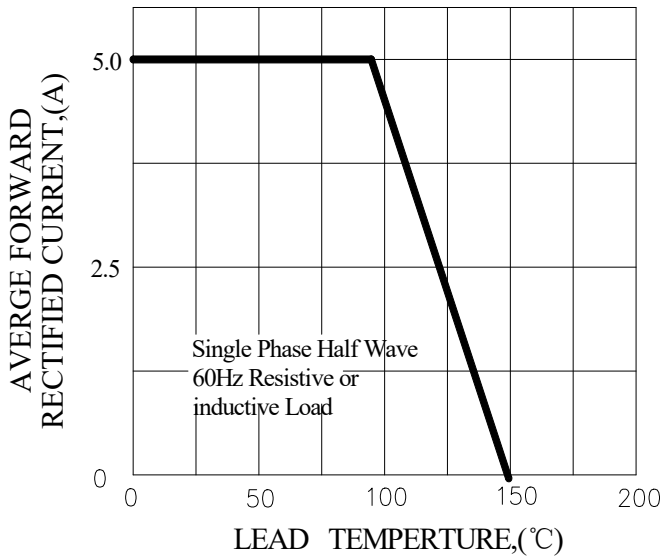


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

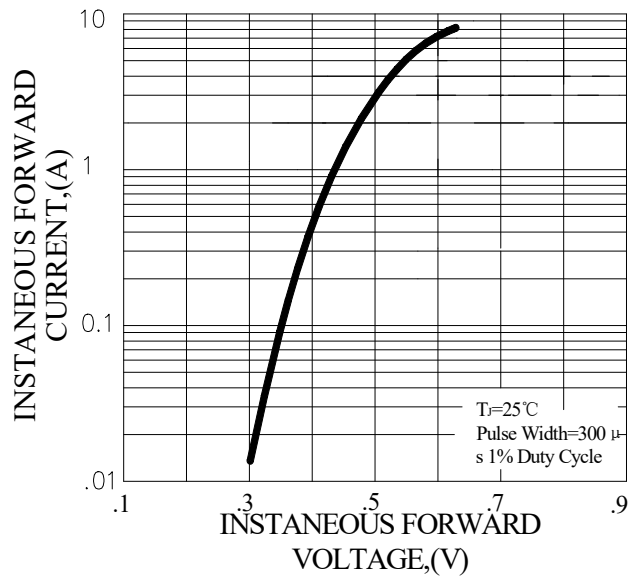


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

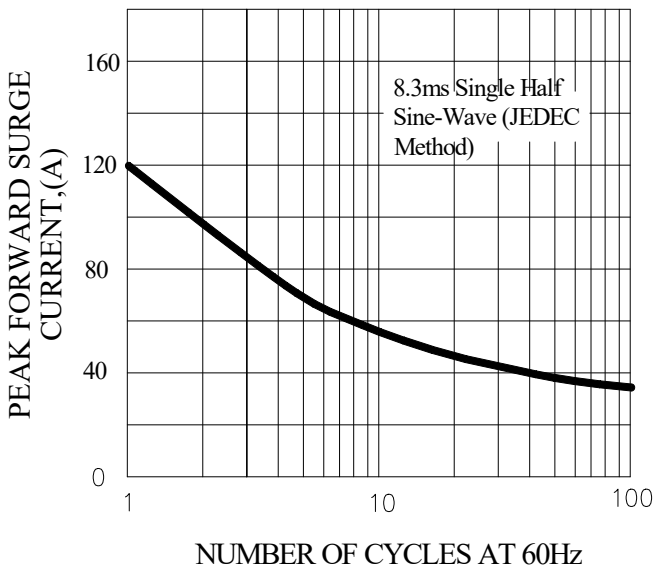
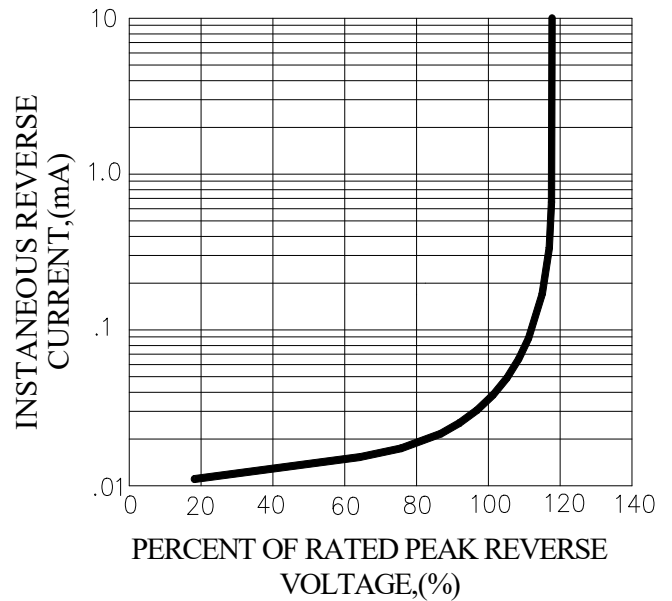
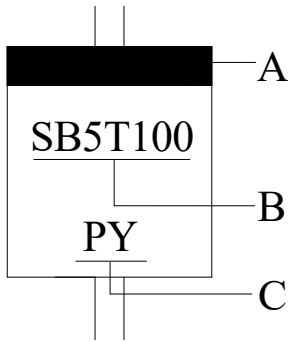


FIG.4-TYPICAL REVERSE CHARACTERISTICS



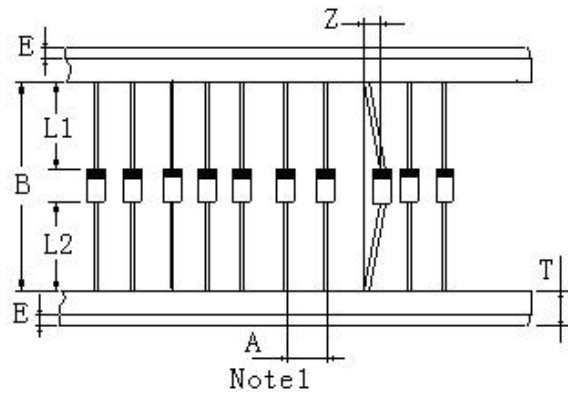
Marking and packaging illustration

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)			