SB5T120

5.0AMPS. SCHOTTKY BARRIER RECTIFIERS

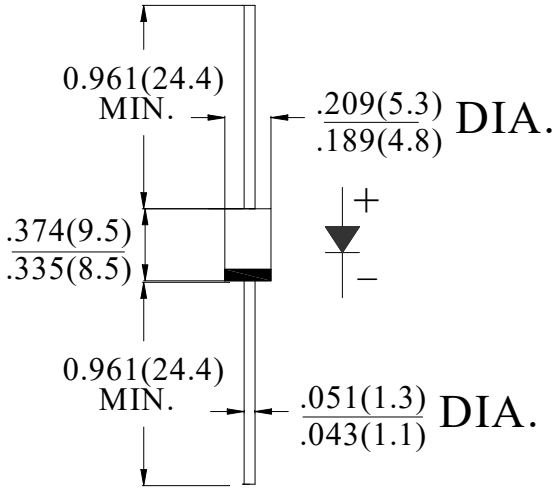
FEATURE

. 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℃/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℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz,resistive or inductive load. For capacitive load, derate current by 20%

Type Number		SYMBOL Marking	SB5T120 SB5T120	units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	120	V
Maximum RMS Voltage		V_{RMS}	84	V
Maximum DC blocking Voltage		V_{DC}	120	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}	100	A
Maximum Forward Voltage	@ IF=5A	V_F	0.68	V
	@ IF=1A		0.52	
Maximum DC Reverse Current	@T_J=25℃	I_R	0.2	mA
at rated DC blocking voltage	@T_J=100℃		10.0	
Typical Junction Capacitance (Note1)		C_J	650	pF
Typical Thermal Resistance (Note2)		$R_{(JC)}$	14	℃/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 and Lead at 0.375"(9.5mm)lead length, vertical P.C.Board Mounted.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

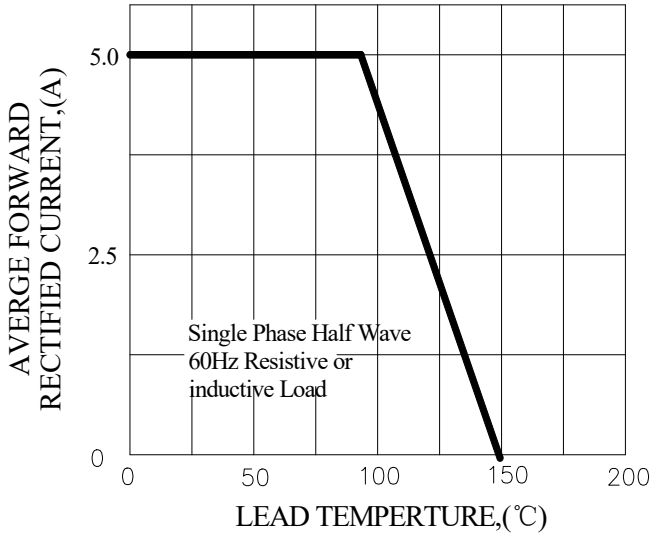


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

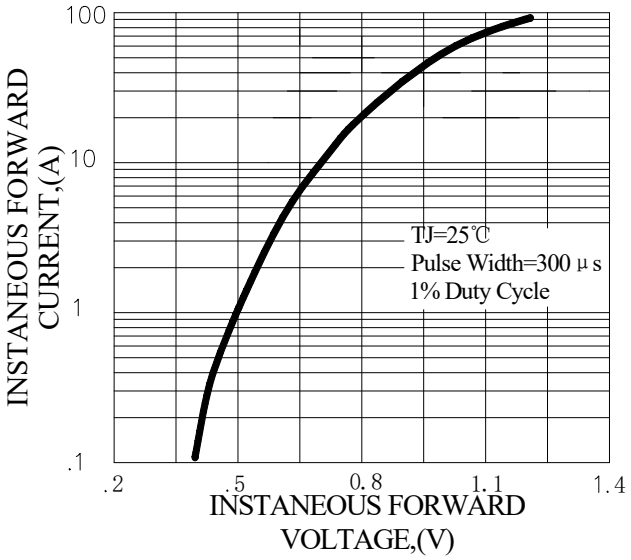


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

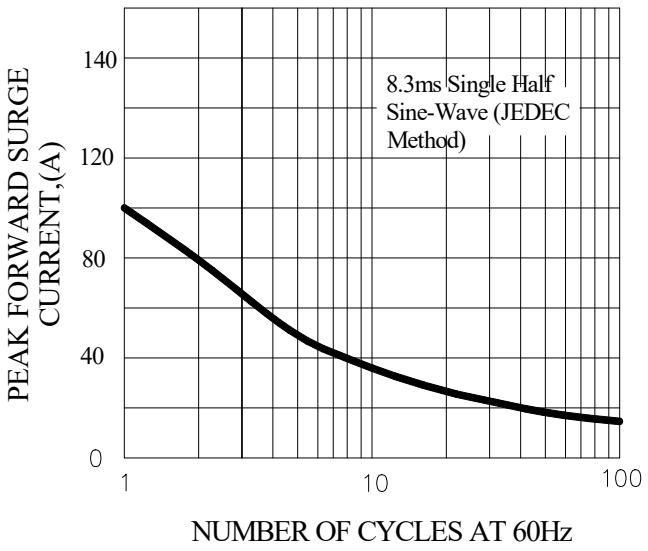
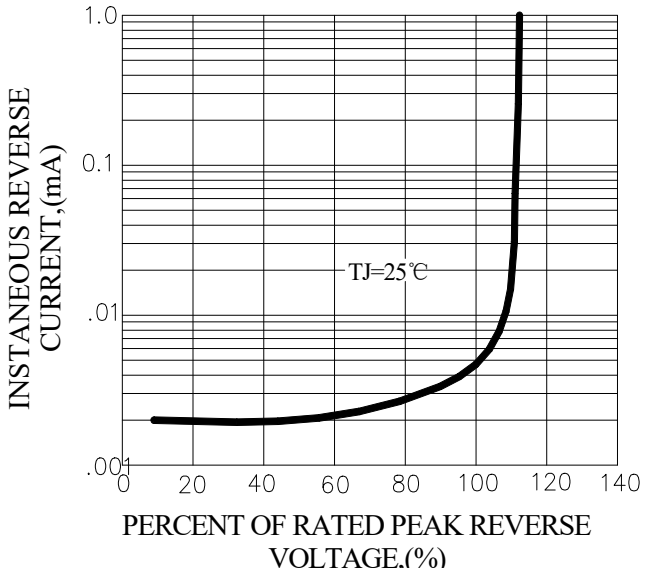
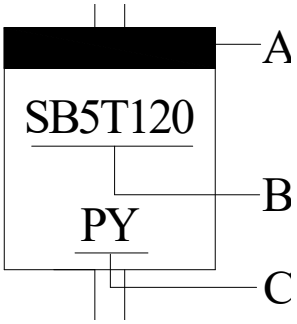


FIG.4-TYPICAL REVERSE CHARACTERISTICS



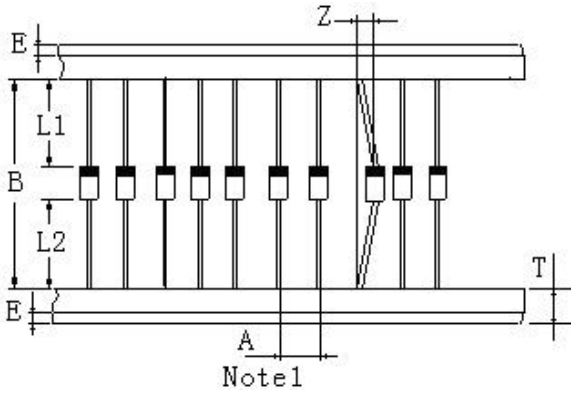
Marking and packaging illustration

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）			