

SS5T8B

5.0AMPS. SCHOTTKY BARRIER RECTIFIERS

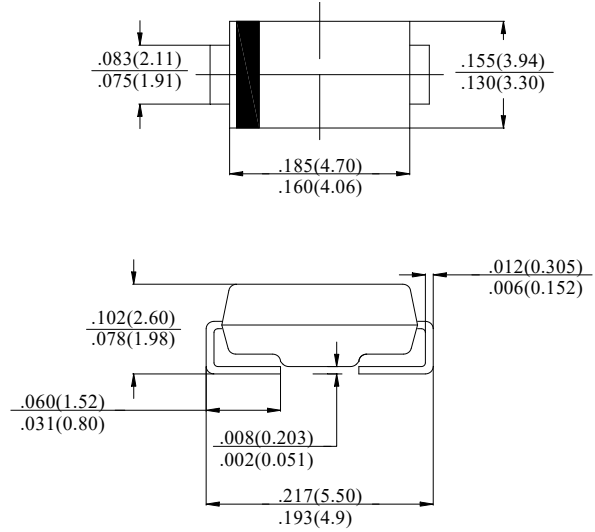
FEATURE

- . 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.
- . For surface mounted application.
- . Easy pick and place.

MECHANICAL DATA

- . Terminal: Solder plated
- . Case: Molded with UL-94 Class V-0 recognized
Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Packaging: 12mm tape per EIA STD RS-481

SMB (DO-214AA)



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	SS5T8B	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	$I_{F(AV)}$	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	0.58	V
Maximum DC Reverse Current @ $T_J=25^{\circ}C$ at rated DC blocking voltage @ $T_J=100^{\circ}C$	I_R	0.1 10.0	mA
Typical Junction Capacitance (Note1)	C_J	700	pF
Typical Thermal Resistance (Note2)	$R_{(JA)}$	55	°C/W
	$R_{(JC)}$	16	
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

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

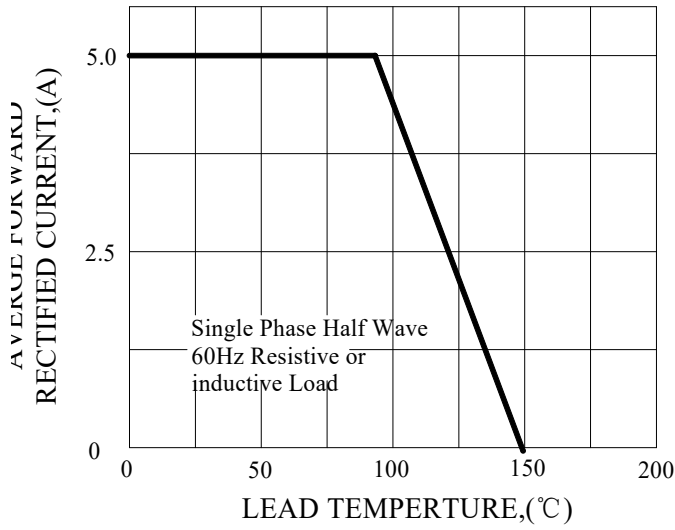


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

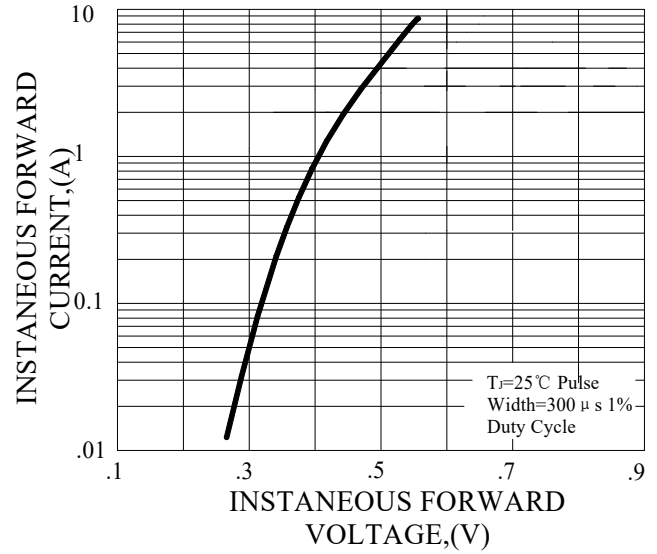


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

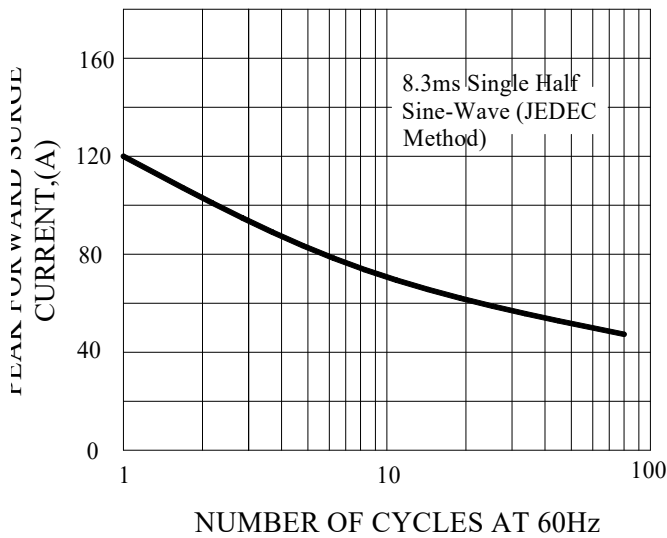
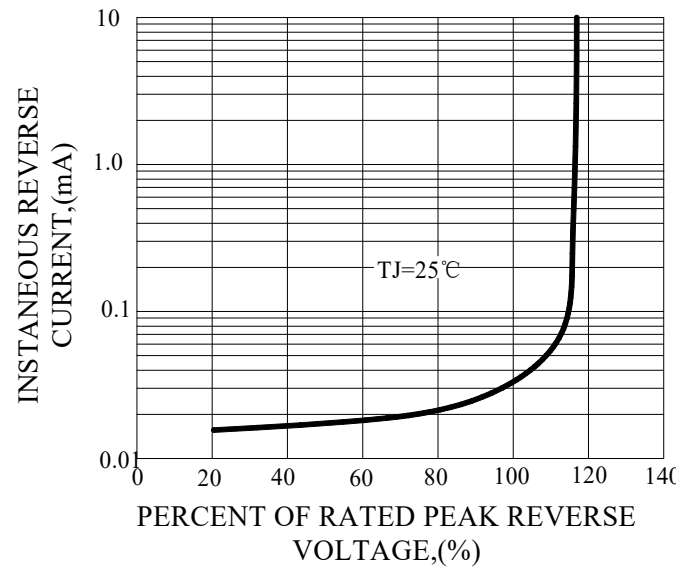
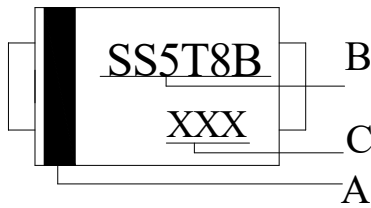


FIG.4-TYPICAL REVERSE CHARACTERISTICS



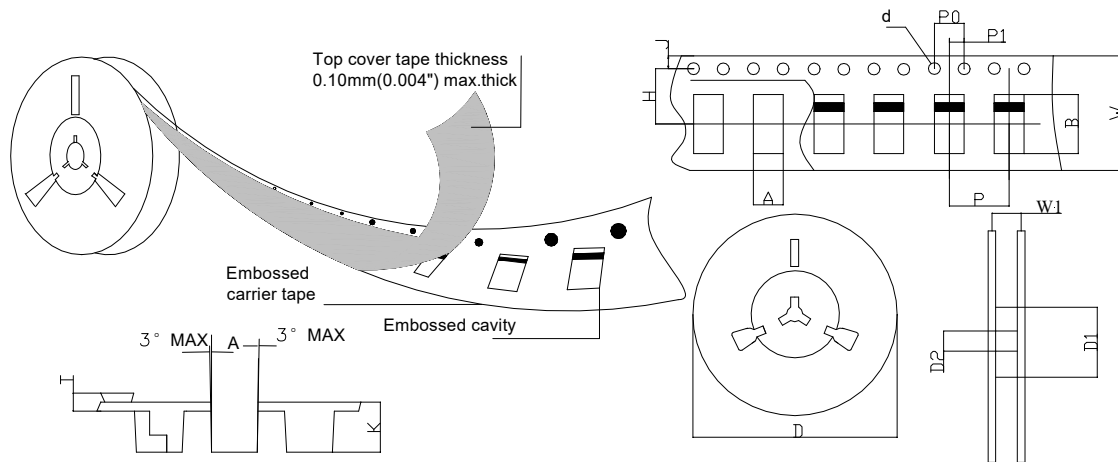
Marking and packaging illustration

1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product Name
C	Date Code

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYM BOL	SMB (DO-214AA)	ITEM	SYM BOL	SMB (DO-214AA)
Carrier width	A	3.81(0.150)Max	Carrier depth	K	2.45(0.965)Typ
Carrier length	B	5.41(0.213)Max	Punch hole pitch	P	4.00(0.157)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(1.969)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	12.0(0.472)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	12.4(0.488)Min
Punch hole position	H	5.55(0.219)Typ			

零件耐溫说明

4、SMT制程的條件:所有SMD貼片元件及錫膏制程過迴焊爐插件(如排插)均符合:

1.1紅膠制程: $120^{\circ}\text{C} \leq T \leq 150^{\circ}\text{C}$ 時間大於120sec

1.2錫膏制程: $245^{\circ}\text{C}/60\text{sec}$ $180^{\circ}\text{C}/120\text{sec}$;MAX 245°C

1.3AI/RI插件符合: 紅膠制程: $120^{\circ}\text{C} \leq T \leq 150^{\circ}\text{C}$ 時間大於120sec

5、Wave Soldering制程條件:

2.1最高溫度: $260+0/-5^{\circ}\text{C}$ 5sec

2.2零件溫升 $\Delta T < 145^{\circ}\text{C}$ (即:零件承受的瞬間溫差須小於 145°C)

3、Soldering Iron制程條件:

3.1SMD貼片元件溫度: $260^{\circ}\text{C} \leq T \leq 320^{\circ}\text{C}$ 時間 5sec

3.2手插元件溫度: $350^{\circ}\text{C} \leq T \leq 420^{\circ}\text{C}$ 時間 5sec