

## SS510B

### 5.0AMP. SCHOTTKY BARRIER RECTIFIERS

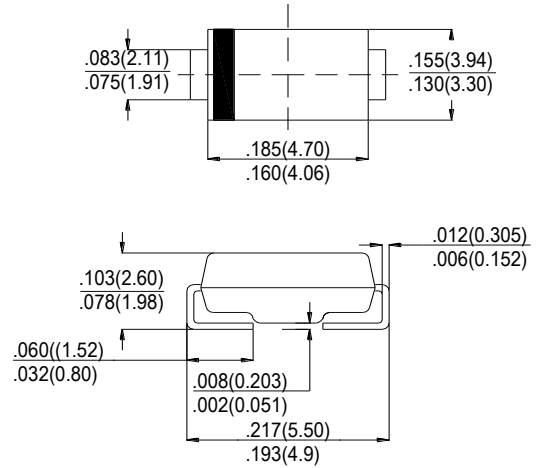
#### FEATURE

- . For surface mounted application
- . High current capability,
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge current capability

#### 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

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25 °C, unless otherwise stated)

Type Number	SYMBOL	SS510B	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 3/8" lead length at TL =90 °C	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current 8.3ms singlehalf sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	120.0	A
Maximum Forward Voltage at 5.0A DC	$V_F$	0.85	V
Maximum DC Reverse Current@Ta =25 °C at rated DC blocking voltage @Ta =100 °C	$I_R$	0.2	mA
		5.0	mA
Typical Junction Capacitance (Note1)	$C_J$	112	pF
Typical Thermal Resistance (Note2)	$R_{(JA)}$	15	°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 (SS510B)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

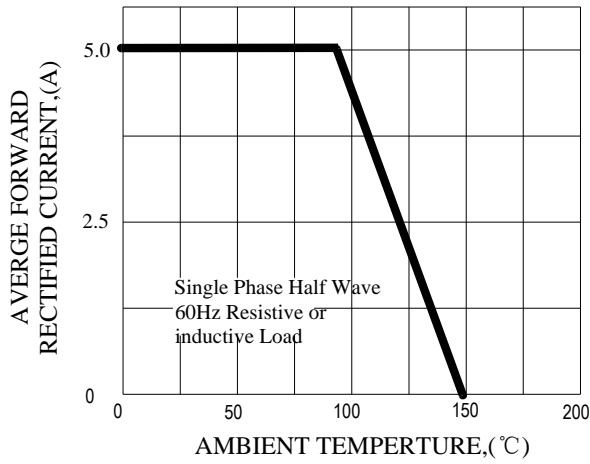


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

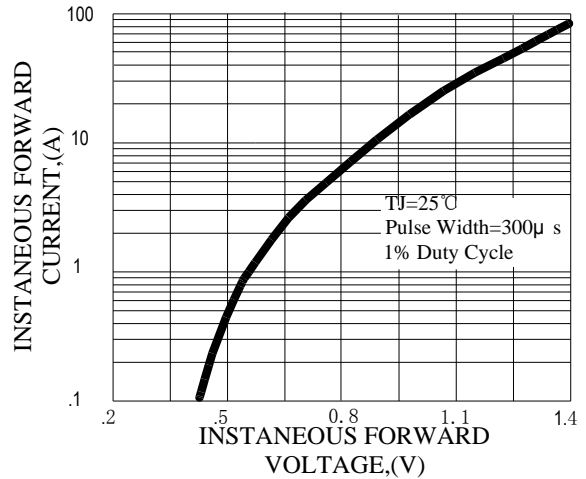


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

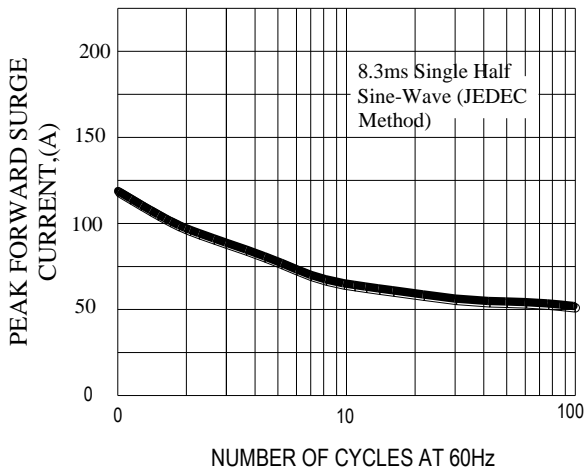
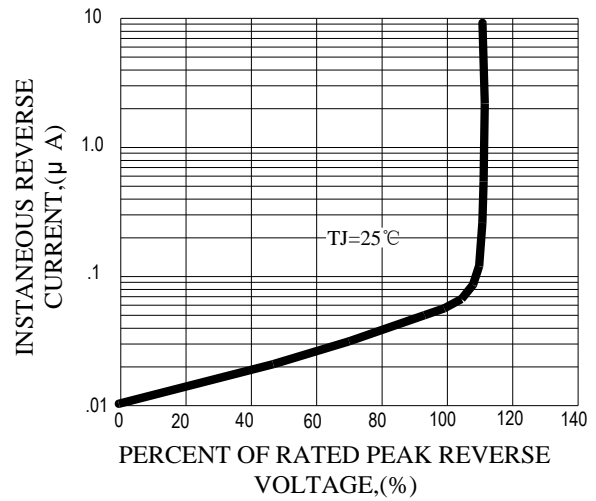
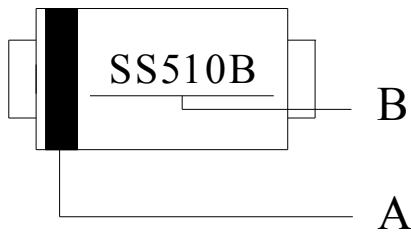


FIG.4-TYPICAL REVERSE CHARACTERISTICS



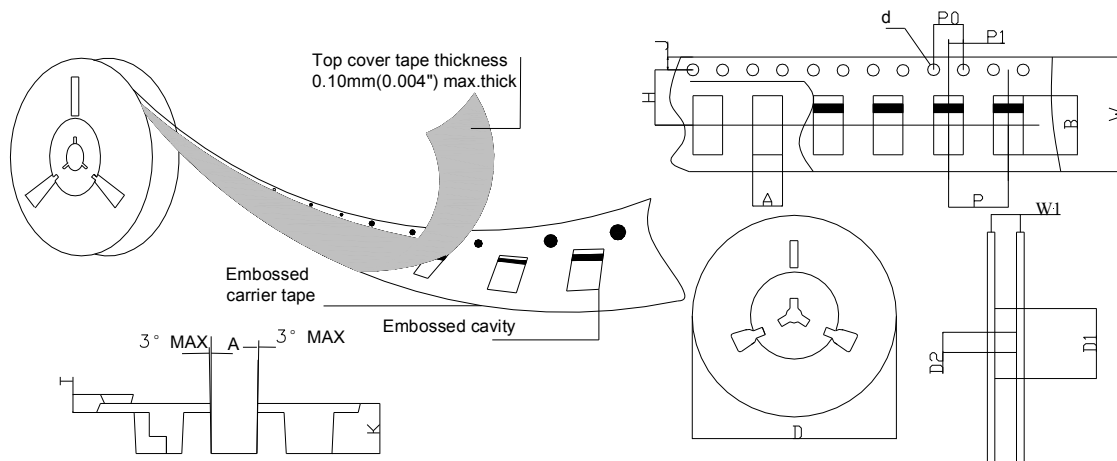
## Marking and packaging illustration

### 1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product name

### 2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE
SYMBOL		SMB(DO-214AA)
ITEM		
Carrier width	A	3.81(0.150)Max
Carrier length	B	5.41(0.213)Max
Sprocket hole	d	ø1.55(0.061)Typ
Reel outer diameter	D	330.0(13.0)Typ
Reel inner diameter	D1	50.0(1.969)Min
Feed hole diameter	D2	13.0(0.512)Typ
Sprocket hole position	J	1.75(0.069)Typ
Punch hole position	H	5.55(0.219)Typ
Carrier depth	K	2.45(0.965)Typ
Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole pitch	P0	4.00(0.157)Typ
Embossment center	P1	2.00(0.079)Typ
Overall tape thickness	T	0.30(0.012)Typ
Tape width	W	12.0(0.472)Typ
Reel width	W1	12.4(0.488)Min