

## SS5T10B

### 5.0AMPS. SCHOTTKY BARRIER RECTIFIERS

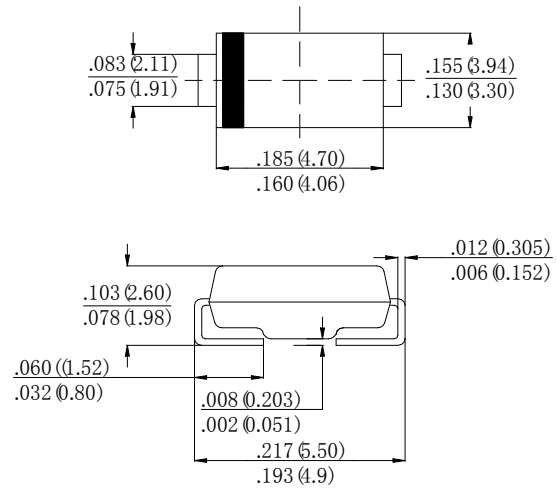
#### FEATURE

- . 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
- . 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	SS5T10B	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 .375"(9.5mm) lead length at $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	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 @ $T_A = 25^\circ\text{C}$	at 5.0A DC	$V_{F Max}$	0.6
	at 2.0A DC	$V_{F Type}$	0.43
Maximum DC Reverse Current at rated DC blocking voltage	@ $T_A = 25^\circ\text{C}$	$I_R$	0.2
	@ $T_A = 100^\circ\text{C}$		10
Typical Junction Capacitance (Note1)	$C_J$	460	pF
Typical Thermal Resistance (Note2)	$R_{(JL)}$	40	$^\circ\text{C/W}$
	$R_{(JC)}$	18	
Storage Temperature	$T_{STG}$	-55 to +150	$^\circ\text{C}$
Operating Junction Temperature	$T_J$	-55 to +150	$^\circ\text{C}$

#### 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 (SS5T10B)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

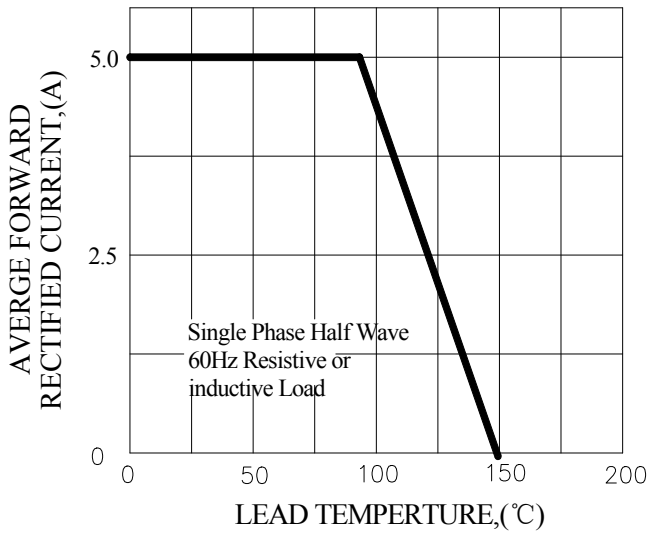


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

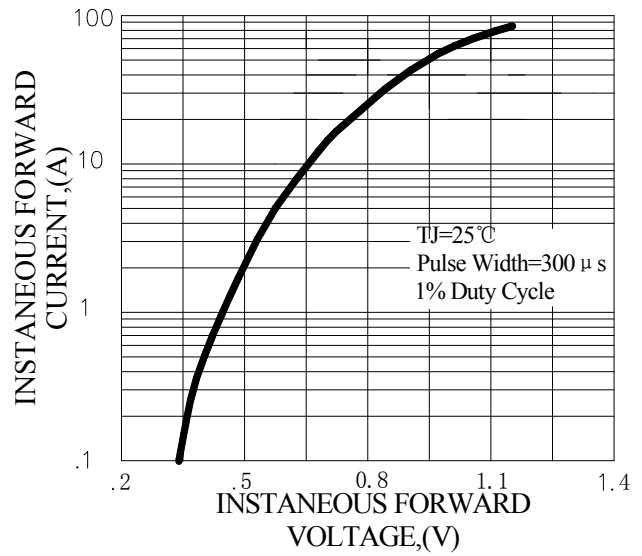


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

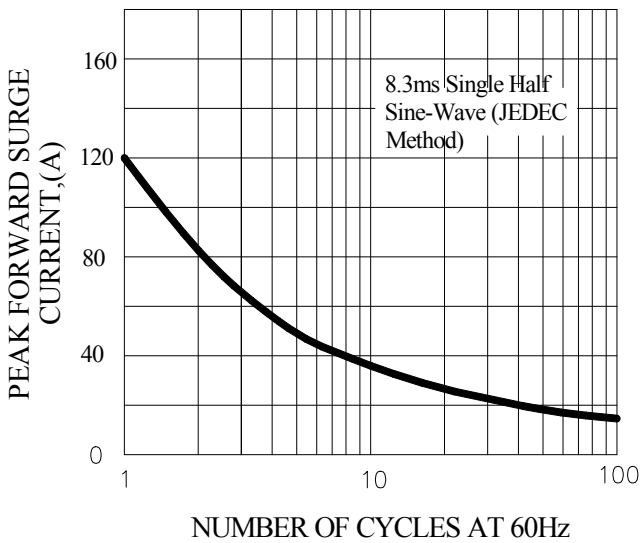


FIG.4-TYPICAL REVERSE CHARACTERISTICS

