

# SS52BF-AT THRU SS520BF-AT

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Forward Current-5A

Reverse Voltage-20V to 200V

### FEATURES

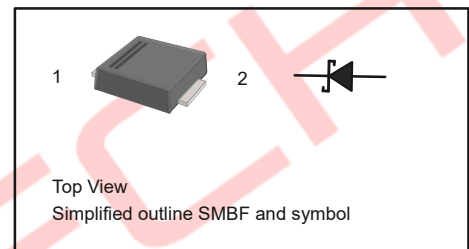
- ◆ For surface mount applications
- ◆ High forward surge current capability
- ◆ Low power loss, high efficiency
- ◆ Metal silicon junction, majority carriers conduction

### MECHANICAL DATA

- ◆ Case: SMBF molded plastic body
- ◆ Terminals: Solderable per MIL-STD-750 , Method 2026
- ◆ Weight: Approximated 0.057 grams

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derating by 20 %.

PARAMETER	SYMBOL	SS52BF-AT	SS54BF-AT	SS56BF-AT	SS58BF-AT	SS510BF-AT	SS512BF-AT	SS515BF-AT	SS520BF-AT	UNIT	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V	
Maximum RMS Voltage	$V_{RMS}$	14	28	42	56	70	84	105	140	V	
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	120	150	200	V	
Maximum Average Forward Rectified Current at $T_C=90^\circ\text{C}$	$I_{F(AV)}$	5.0								A	
Peak Forward Surge Current (Note1)	$I_{FSM}$	150								A	
Maximum Forward Voltage at 5.0 A	$V_F$	0.55		0.70		0.85			V		
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$					1.0 50					mA
Typical Junction Capacitance (Note2)	$C_J$	800		500					pF		
Typical Thermal Resistance(Note3)	$R_{\theta JA}$	45								$^\circ\text{C/W}$	
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150								$^\circ\text{C}$	

Notes: 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method).

2. Measured at 1MHz and applied reverse voltage of 4 V D.C.

3. P.C.B. mounted with 2.0" X 2.0" (5cm X 5 cm) copper pad areas.

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## RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

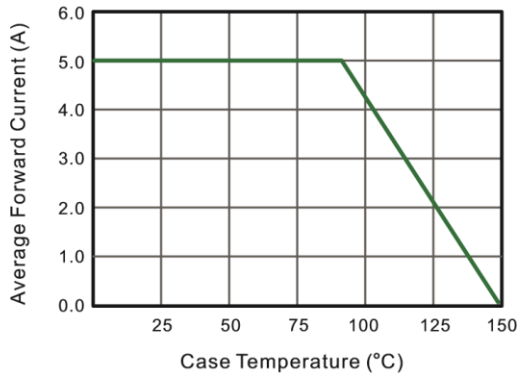


Fig.2 Typical Reverse Characteristics

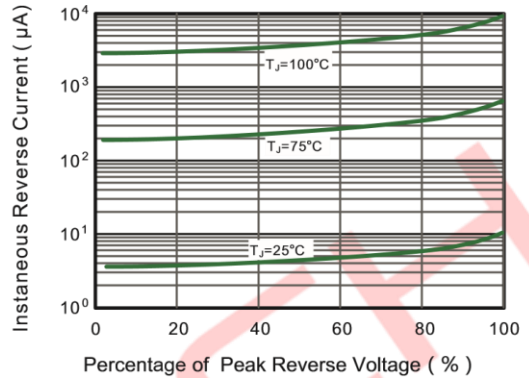


Fig.3 Typical Forward Characteristic

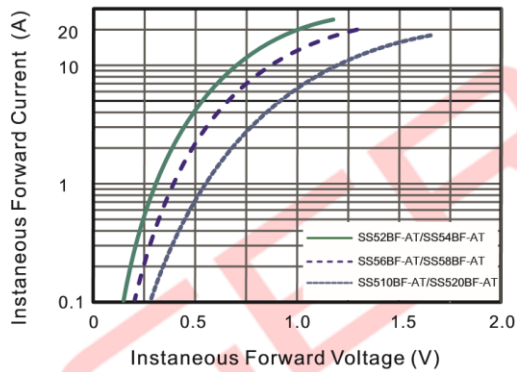


Fig.4 Typical Junction Capacitance

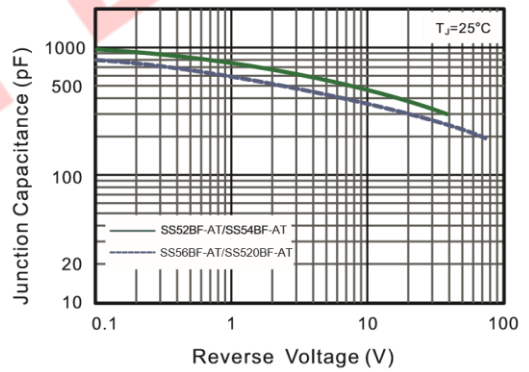


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

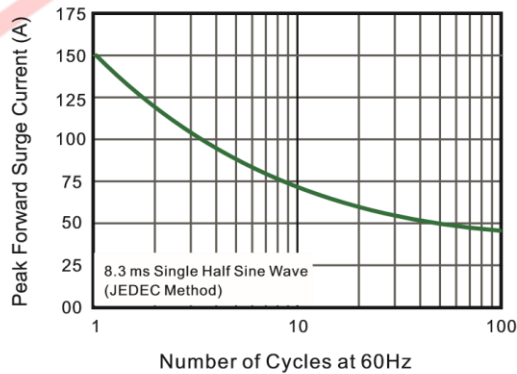
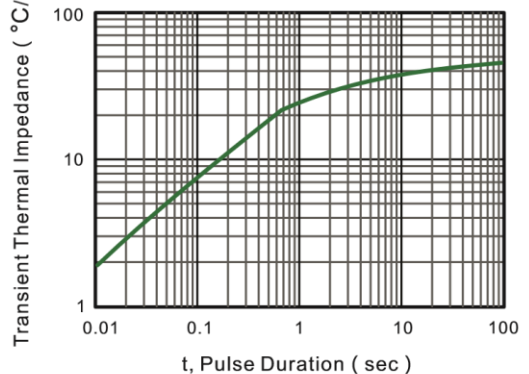


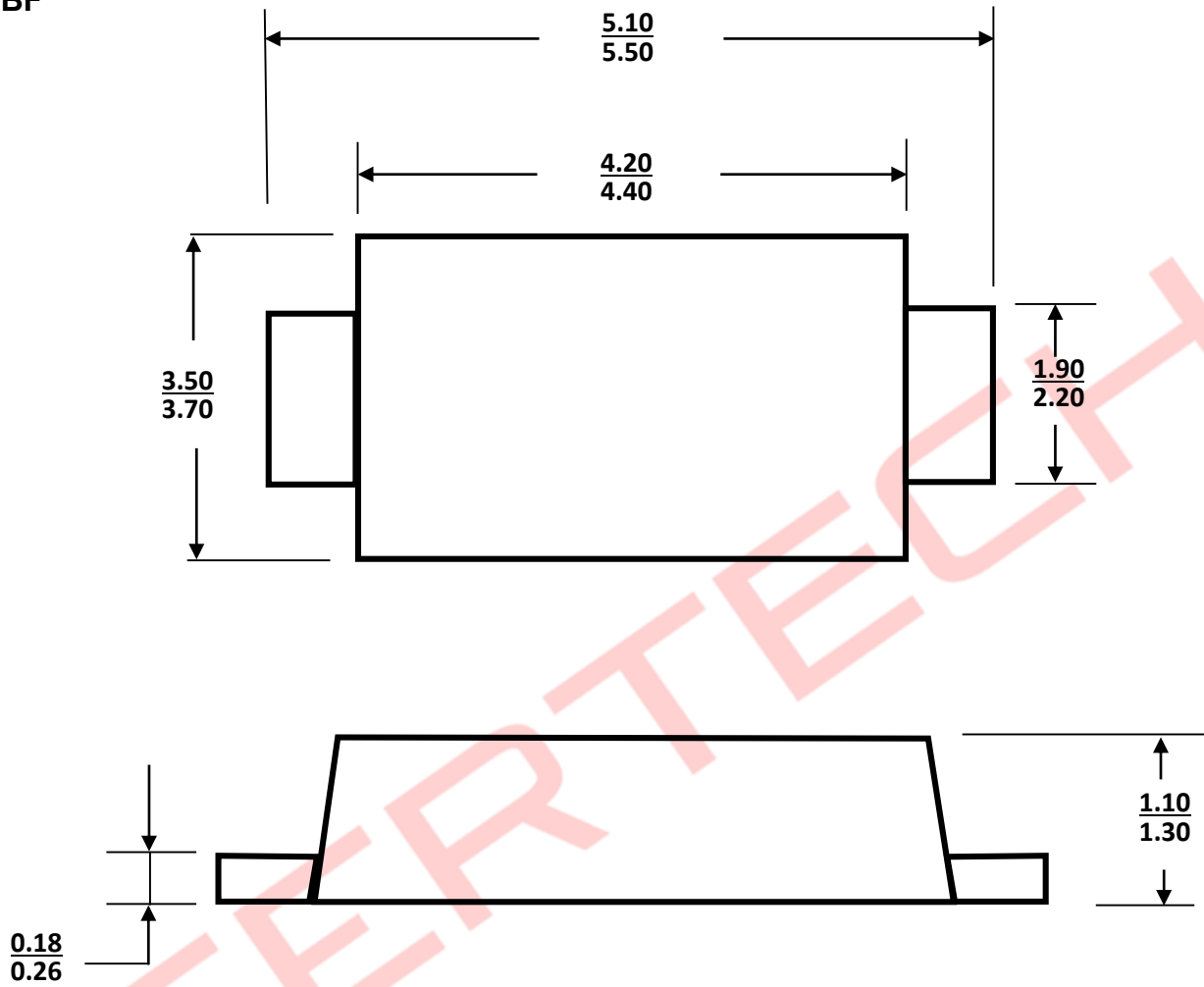
Fig.6- Typical Transient Thermal Impedance



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## PACKAGE OUTLINE

SMBF



Dimensions in millimeters

### ORDERING INFORMATION

Device	Package	Shipping
SS52BF-AT thru SS520BF-AT	SMBF	5,000/Tape & Reel (13 inches)