

FEATURES

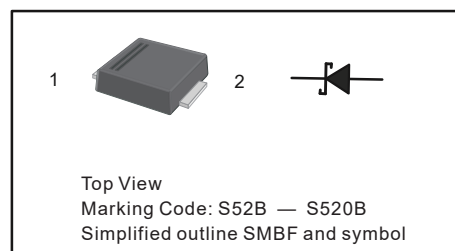
- ◆ For surface mount applications
- ◆ High forward surge current capability
- ◆ Low power loss,high efficiency
- ◆ Metal silicon junction,majority carriers conduction

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

MECHANICAL DATA

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



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 -TN	SS54BF -TN	SS56BF -TN	SS58BF -TN	SS510BF -TN	SS512BF -TN	SS515BF -TN	SS520BF -TN	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°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°C T _A =100°C	I _R	1.0 50								mA
Typical Junction Capacitance (Note2)	C _J	800		500						pF
Typical Thermal Resistance(Note3)	R _{θJA}	45								°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150								°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.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

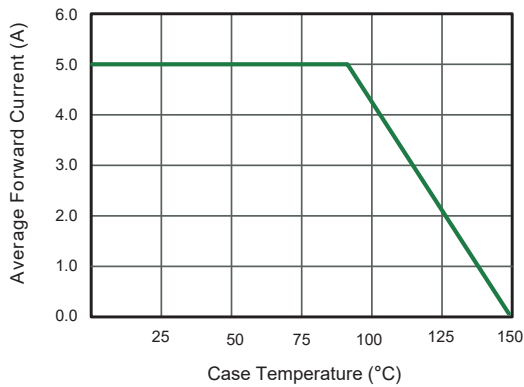


Fig.2 Typical Reverse Characteristics

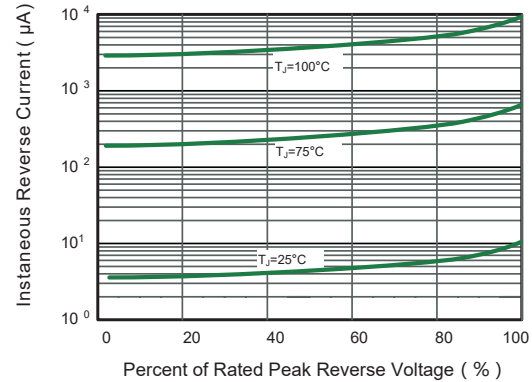


Fig.3 Typical Forward Characteristic

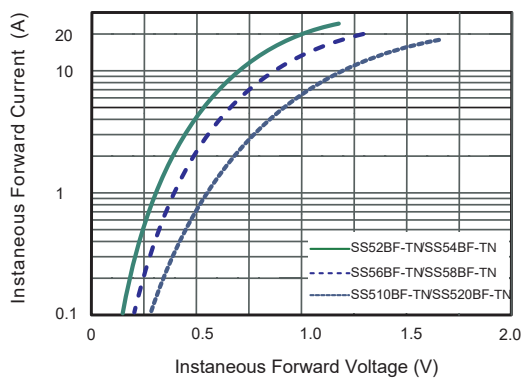


Fig.4 Typical Junction Capacitance

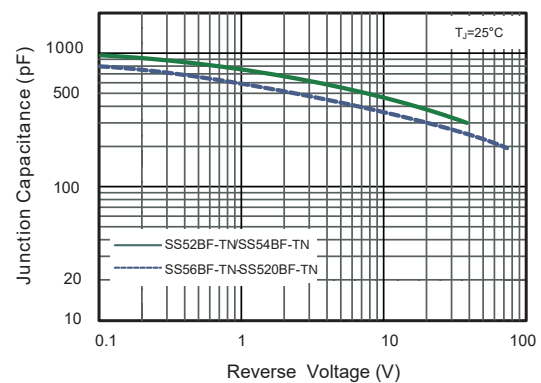


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

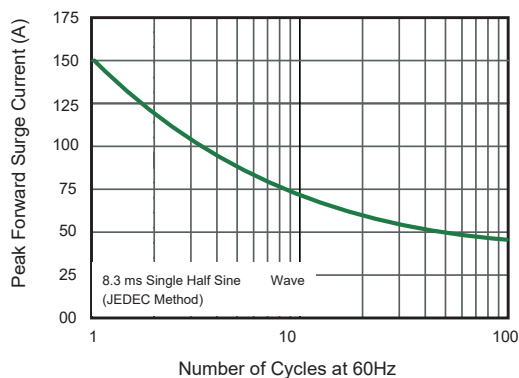
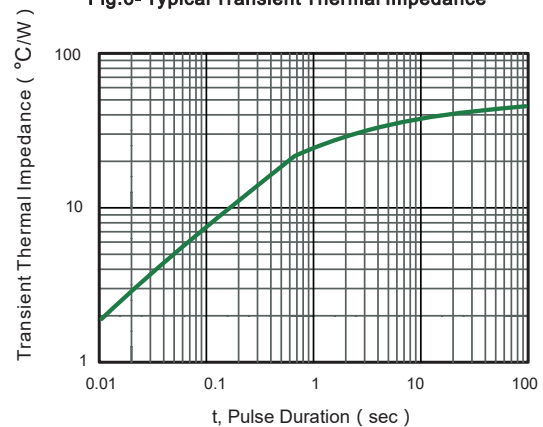
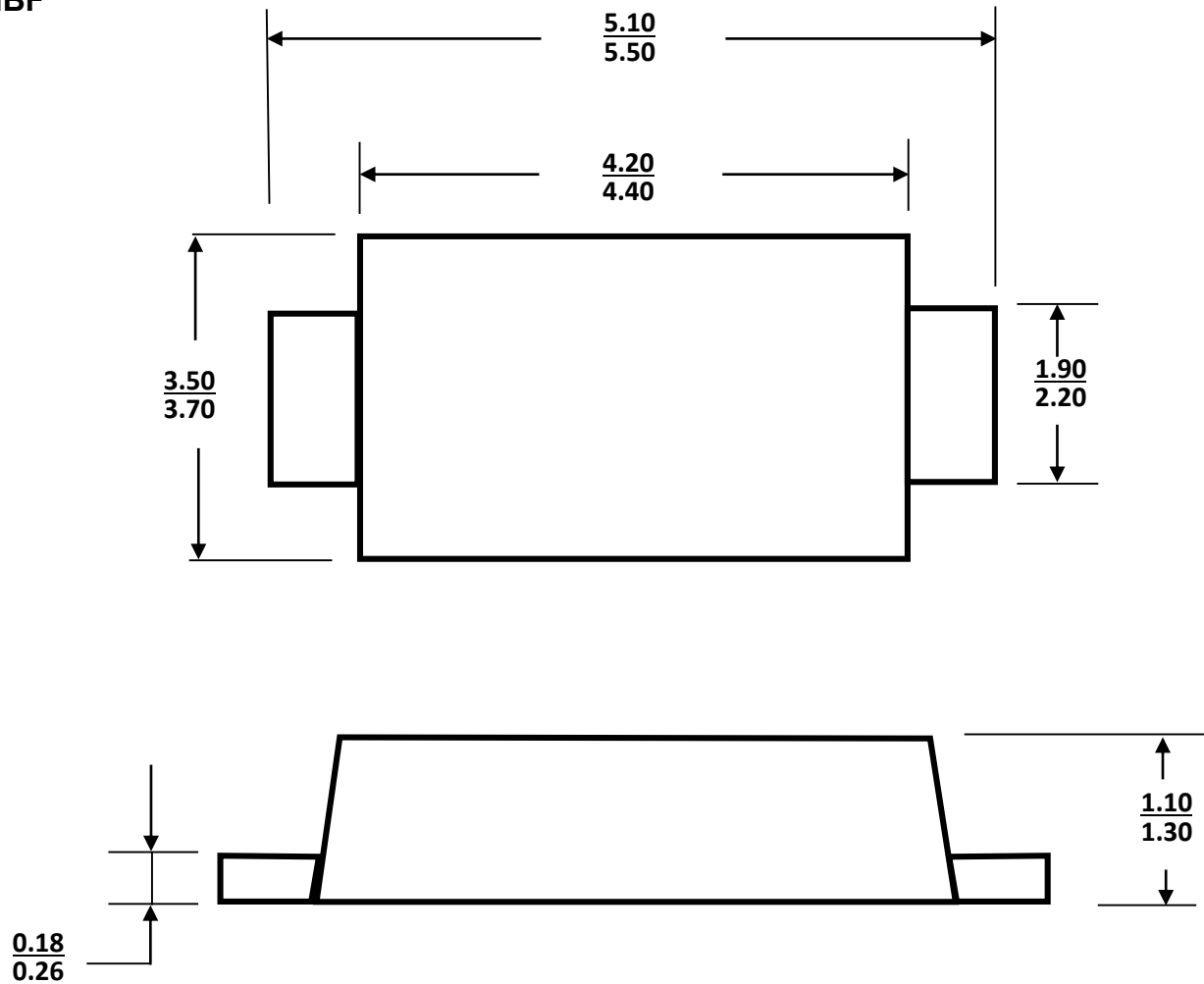


Fig.6- Typical Transient Thermal Impedance



PACKAGE OUTLINE

SMBF



Dimensions in millimeters

ORDERING INFORMATION

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