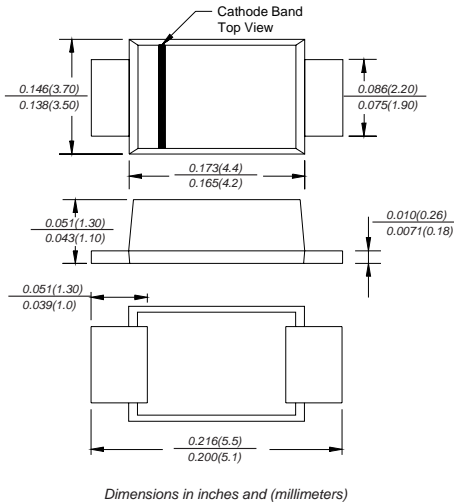


## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts    Forward Current -5.0 Ampere

### SMBF



### Features

- ◆ Metal silicon junction, majority carrier conduction
- ◆ For surface mounted applications
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

### Mechanical Data

**Case:** JEDEC SMBF molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Mounting Position:** Any  
**Weight:** 57mg/0.002oz

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

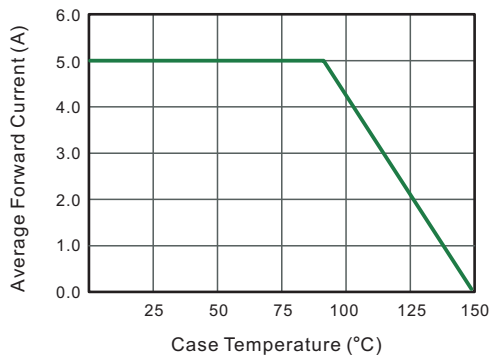
Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| MDD Catalog Number  | SYMBOLS         | SS52BF      | SS54BF | SS56BF | SS58BF | SS510BF | SS515BF | SS520BF | UNITS        |
|---|-----------------|-------------|--------|--------|--------|---------|---------|---------|--------------|
| Marking code  |                 | S52B        | S54B   | S56B   | S58F   | S510B   | S515B   | S520B   |              |
| Maximum repetitive peak reverse voltage   | $V_{RRM}$       | 20          | 40     | 60     | 80     | 100     | 150     | 200     | VOLTS        |
| Maximum RMS voltage   | $V_{RMS}$       | 14          | 28     | 42     | 56     | 70      | 105     | 140     | VOLTS        |
| Maximum DC blocking voltage   | $V_{DC}$        | 20          | 40     | 60     | 80     | 100     | 150     | 200     | VOLTS        |
| Maximum average forward rectified current at $T_L$ (see fig.1)                                      | $I_{(AV)}$      | 5.0         |        |        |        |         |         |         | Amp          |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$       | 150.0       |        |        |        |         |         |         | Amps         |
| Maximum instantaneous forward voltage at 5.0A   | $V_F$           | 0.55        |        | 0.70   |        | 0.85    |         | 0.95    | Volts        |
| Maximum DC reverse current<br>$T_A=25^\circ C$<br>at rated DC blocking voltage<br>$T_A=100^\circ C$ | $I_R$           | 1.0<br>50   |        |        |        |         |         |         | mA           |
| Typical junction capacitance (NOTE 1)   | $C_J$           | 800         |        |        | 500    |         |         |         | pF           |
| Typical thermal resistance (NOTE 2)   | $R_{\theta JA}$ | 40.0        |        |        |        |         |         |         | $^\circ C/W$ |
| Operating junction temperature range  | $T_J$           | -50 to +125 |        |        |        |         |         |         | $^\circ C$   |
| Storage temperature range   | $T_{STG}$       | -50 to +150 |        |        |        |         |         |         | $^\circ C$   |

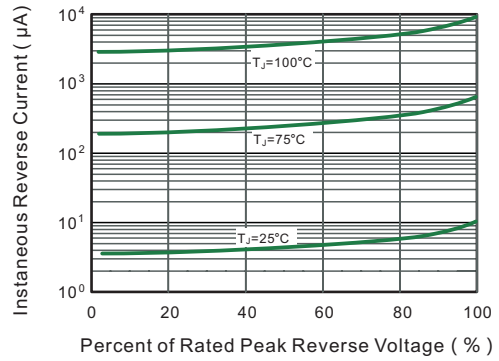
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

**RATINGS AND CHARACTERISTIC CURVES SS52BF THRU SS520BF**

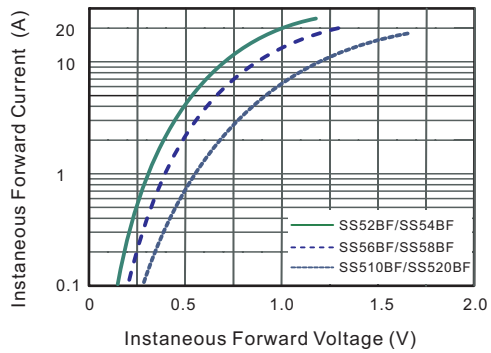
**Fig.1 Forward Current Derating Curve**



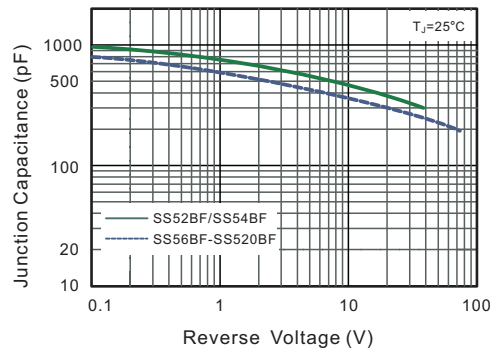
**Fig.2 Typical Reverse Characteristics**



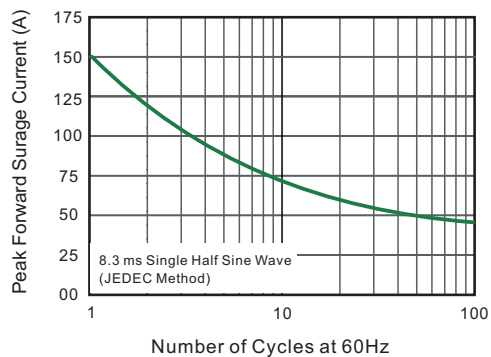
**Fig.3 Typical Forward Characteristic**



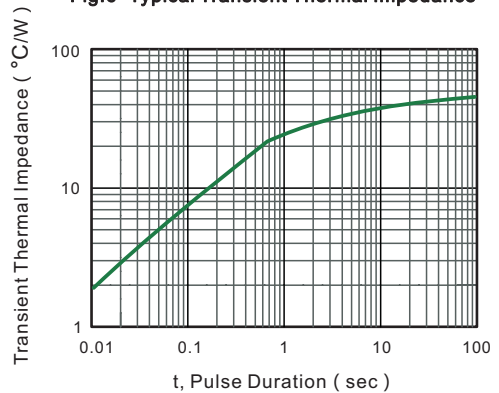
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**



单击下面可查看定价，库存，交付和生命周期等信息

[>>DIOS\(迪恩思\)](#)