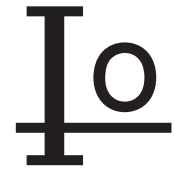


# SS545LF



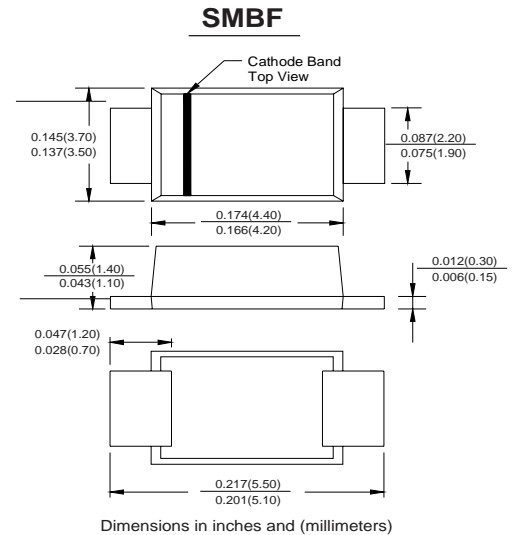
Surface Mount Schottky Barrier Rectifier  
Reverse Voltage - 45V Forward Current - 5.0A

## 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: SMBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 57 mg / 0.002oz



## Absolute 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 by 20 %

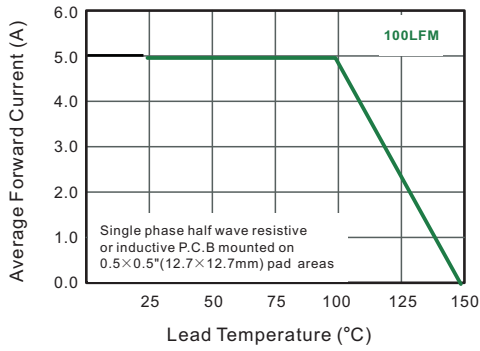
Parameter	Symbols	SS545 LF	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	45	V
Maximum RMS voltage	$V_{RMS}$	32	V
Maximum DC Blocking Voltage	$V_{DC}$	45	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	125	A
Max Instantaneous Forward Voltage at 5 A	$V_F$	0.45	V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 100^{\circ}C$	$I_R$	0.5 20	mA
Typical Junction Capacitance <sup>1)</sup>	$C_j$	800	pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	40	$^{\circ}C/W$
Operating Junction Temperature Range	$T_j$	-55 ~ +150	$^{\circ}C$
Storage Temperature Range	$T_{stg}$	-55 ~ +150	$^{\circ}C$

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

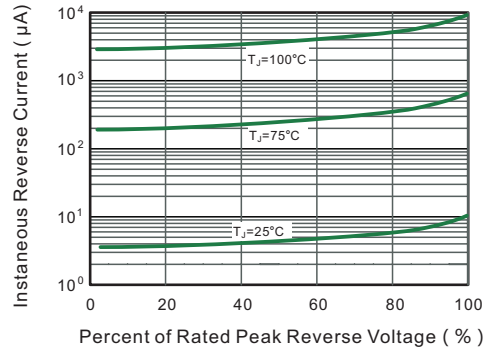
2) P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.

# RATINGS AND CHARACTERISTIC CURVES SS545LF

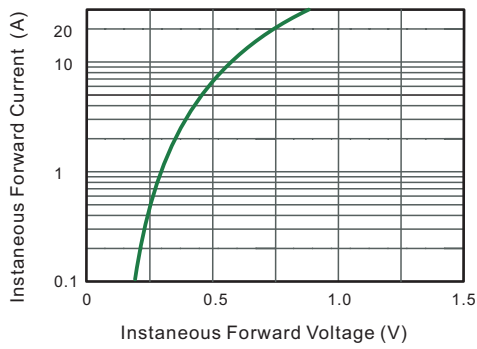
**Fig.1 Forward Current Derating Curve**



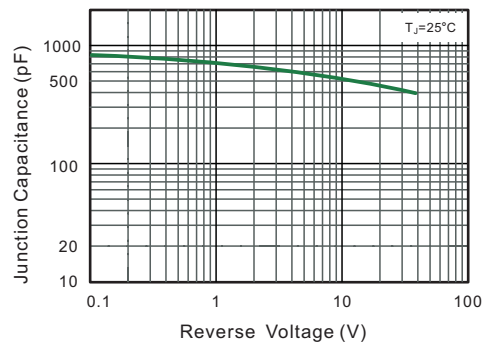
**Fig.2 Typical Reverse Characteristics**



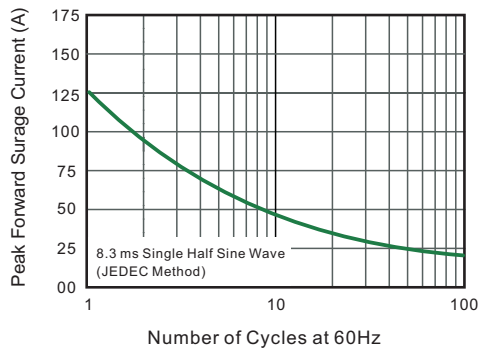
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



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



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

