

# SS510LF

Io

ULTRA LOW VF SCHOTTKY RECTIFIER  
VOLTAGE 100 Volt CURRENT 5 Ampere

## FEATURES

- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Lead free in compliance with EU RoHS 2011/65/EU directive

## MECHANICAL DATA

Case : Molded plastic,SMBFL

Terminals : Axial leads,solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

Approx weight : 0.057grams

Lead Free Finish/RoHS Compliant

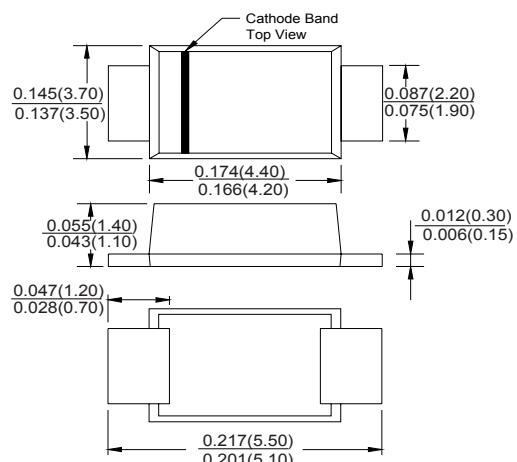
## VOLTAGE RANGE

100 Volts

## CURRENT

5.0 Amperes

### SMBFL



Dimensions in inches and (millimeters)

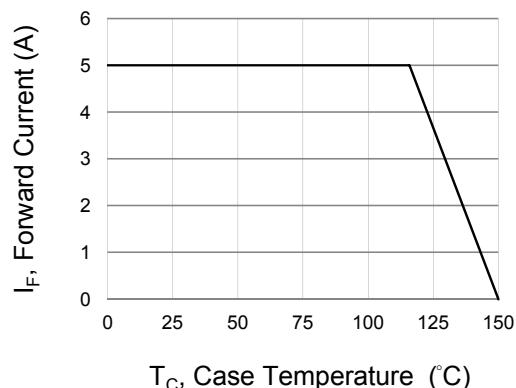
## MAXIMUM RATINGS(T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	100	V
Maximum rms voltage	V <sub>RMS</sub>	70	V
Maximum dc blocking voltage	V	100	V
Maximum average forward rectified current	I <sub>(AV)</sub>	5	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	125	A
Typical thermal resistance(Note 1)R	θ <sub>JL</sub>	23	°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to + 150	°C
Storage temperature range	T <sub>STG</sub>	-55 to + 150	°C

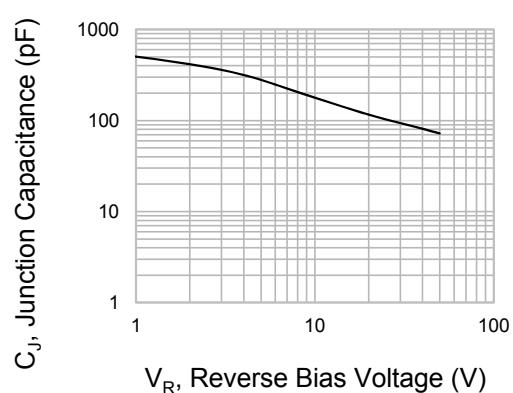
Note : 1.The testing condition of the thermal resistance (junction to lead) is based on 10 mm lead length between two 10cm x 10cm x0.5mm copper pad.

**ELECTRICAL CHARACTERISTICS( $T_A=25^\circ\text{C}$  unless otherwise noted)**

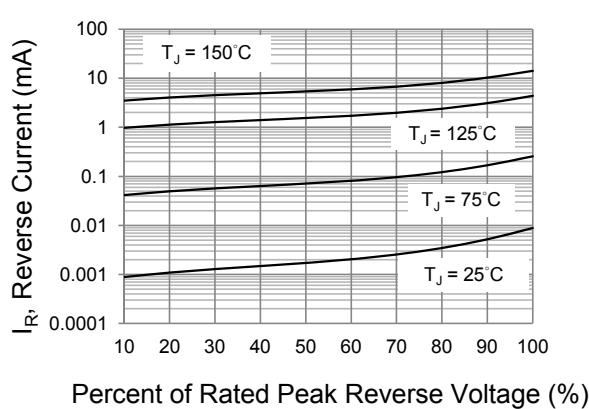
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT		
Breakdown voltage	$V_{BR}$	$I_R=0.5\text{mA}$ $T_J=25^\circ\text{C}$	100	-	-	V		
Instantaneous forward voltage	$V_F$	$I_F=1\text{A}$ $T_J=25^\circ\text{C}$	-	0.42	-	V		
		$I_F=3\text{A}$ $T_J=25^\circ\text{C}$	-	0.51	-			
		$I_F=5\text{A}$ $T_J=25^\circ\text{C}$	-	-	0.60			
		$I_F=1\text{A}$ $T_J=125^\circ\text{C}$	-	0.32	-	V		
Reverse current	$I_R$	$V_R=80\text{V}$ $T_J=25^\circ\text{C}$	-	5	-	$\mu\text{A}$		
		$V_R=100\text{V}$ $T_J=25^\circ\text{C}$	-	-	50	$\mu\text{A}$		
		$T_J=125^\circ\text{C}$	-	5	-	mA		



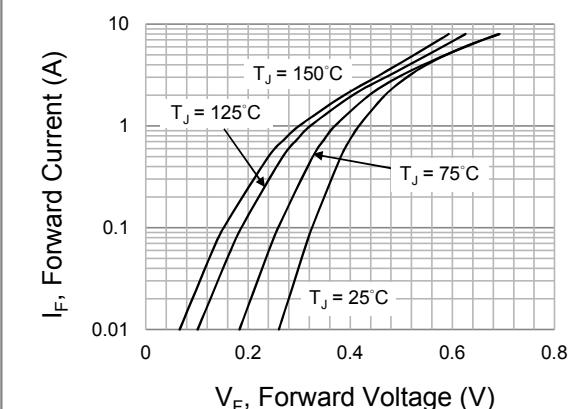
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**