



## Features

- Average Forward Current:  $I_{F(AV)}=5A$
- Polarity: Color band denotes cathode

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
SR56F_R1_00001	SMBF	SS54BF	3000



SMBF



## Maximum Ratings (Ta=25°C unless otherwise noted)

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

Item	Symbol	Test Conditions	Limit	Unit
Repetitive Peak Reverse Voltage Maximum DC Blocking Voltage	$V_{RRM}$ $V_{DC}$		40	V
Maximum RMS Voltage	$V_{RMS}$		28	V
Average Forward Current	$I_{F(AV)}$	60Hz Half-sine wave, Resistance load, FIG.1	5.0	A
Surge(Non-repetitive)Forward Current	$I_{FSM}$	60Hz Half-sine wave, 1 cycle, Ta=25°C	150	A
Junction Temperature	$T_J$		-50 ~ +150	°C
Storage Temperature	$T_{STG}$		-50 ~ +150	°C

## Electrical Characteristics (Ta=25°C unless otherwise specified)

Item	Symbol	Test Condition		Limit	Unit
Peak Forward Voltage	$V_F$	$I_F=5.0A$		0.55	V
Peak Reverse Current	$I_{RRM1}$	$V_{RM}=V_{RRM}$	Ta=25°C	1.0	mA
	$I_{RRM2}$		Ta=100°C	5.0	
Thermal Resistance(Typical)	$R_{\theta J-A}$	Between junction and ambient		45	°C/ W

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

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



## Typical Characteristics

Fig.1 Forward Current Derating Curve

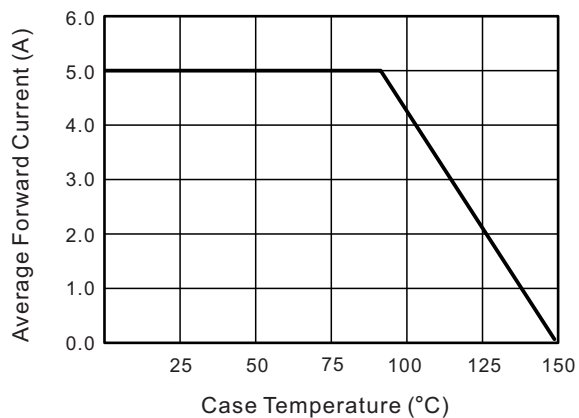


Fig.2 Typical Reverse Characteristics

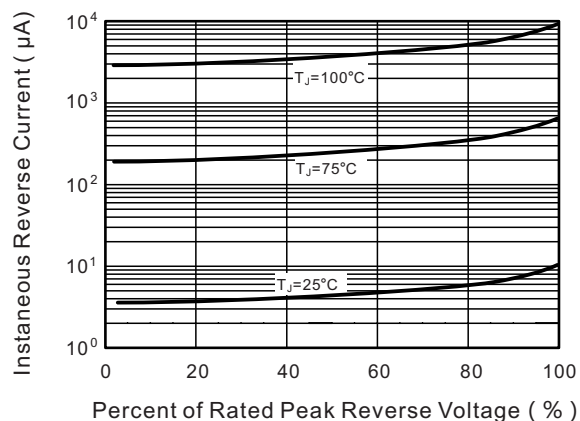


Fig.3 Typical Forward Characteristic

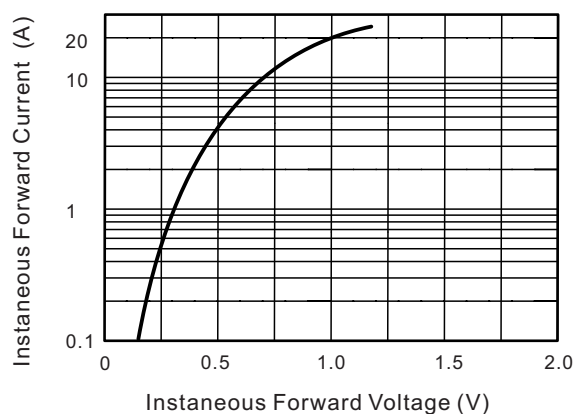


Fig.4 Typical Junction Capacitance

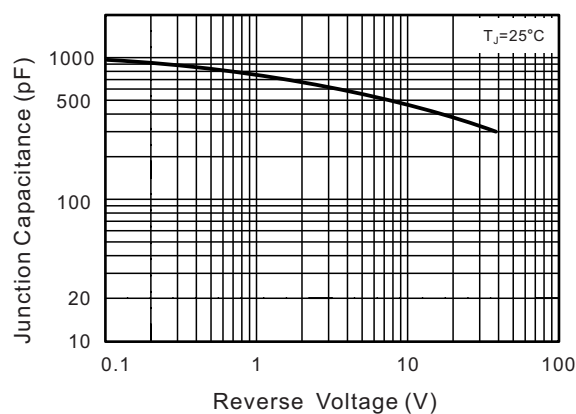


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

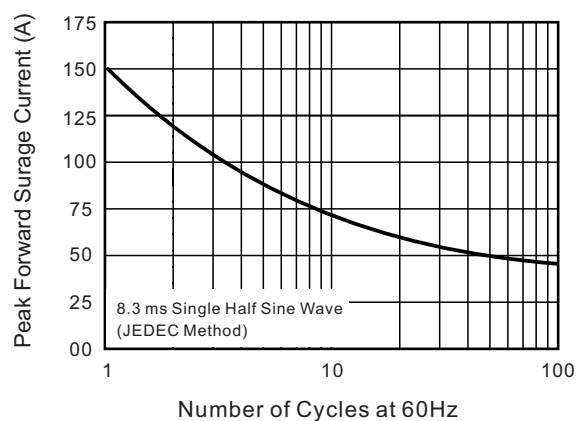
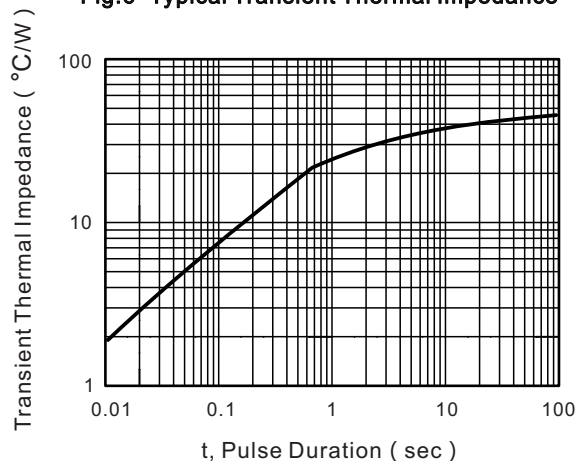


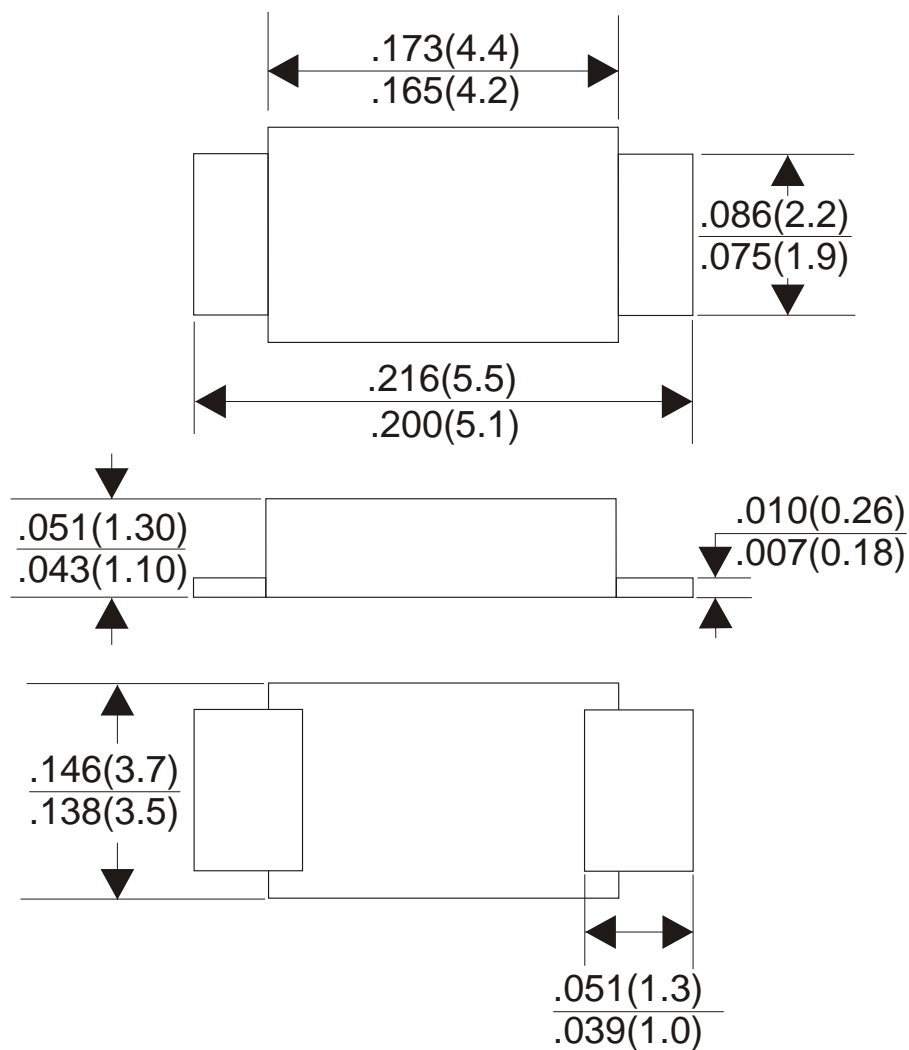
Fig.6- Typical Transient Thermal Impedance





## Package Outline Dimensions

### SMBF



Dimensions in inches and (millimeters)



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