



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	V_{RRM}		40	V
Maximum DC Blocking Voltage	V_{DC}			
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

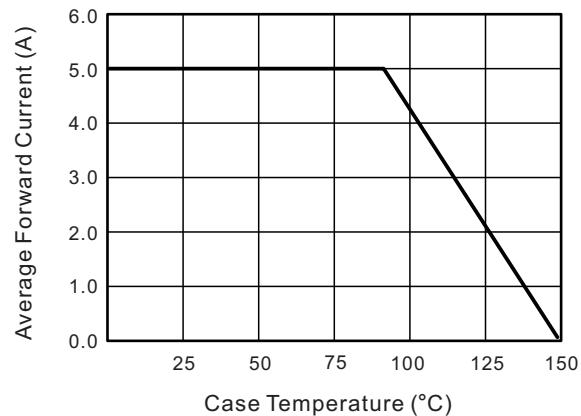


Fig.3 Typical Forward Characteristic

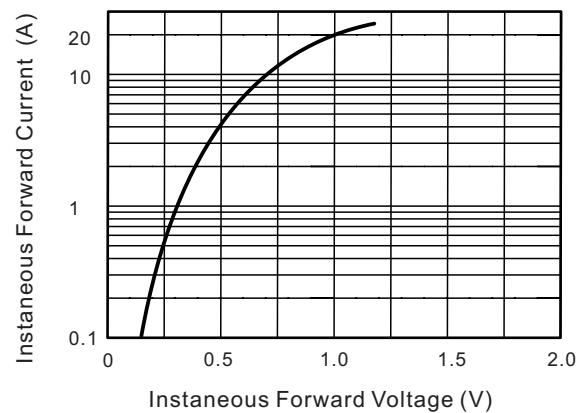


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

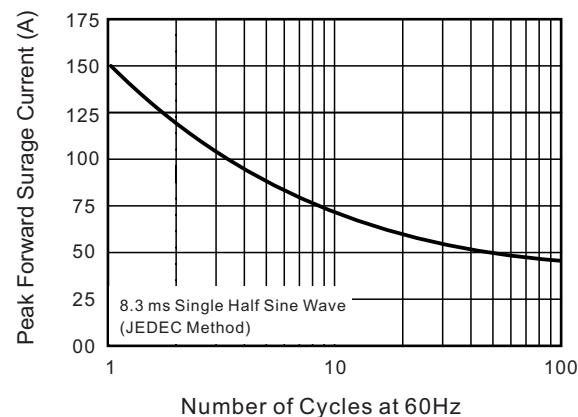


Fig.2 Typical Reverse Characteristics

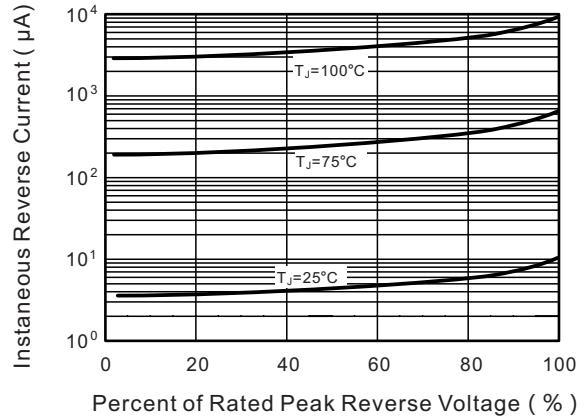


Fig.4 Typical Junction Capacitance

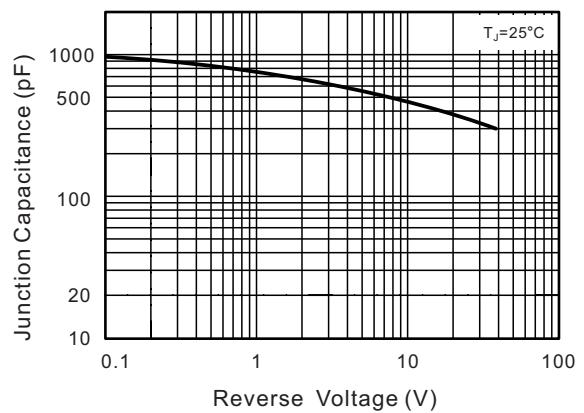
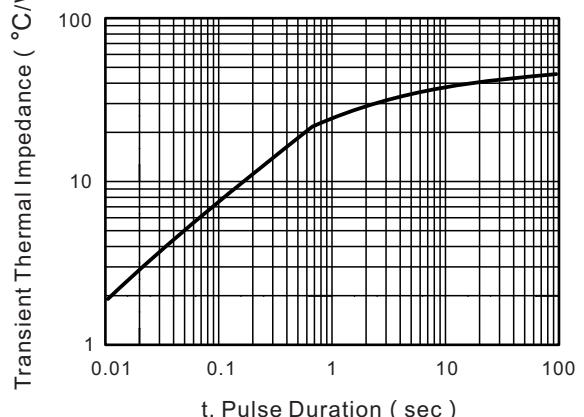


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

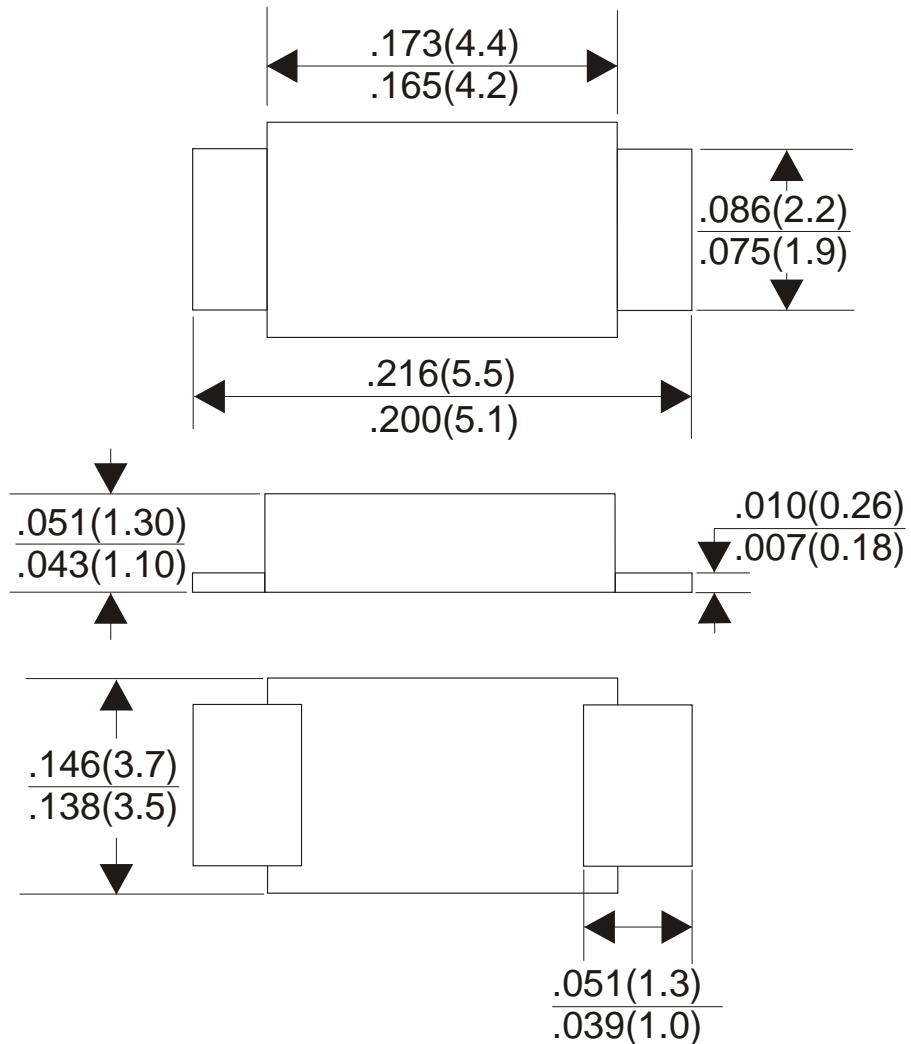
Fig.6- Typical Transient Thermal Impedance





Package Outline Dimensions

SMBF



Dimensions in inches and (millimeters)



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