



Features

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

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
SS52BF ~SS520BF	SMBF	SS5xBF	3000

x: From 2-20



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	Unit	Test Conditions	SS5							
				2	4	6	8	10	12	15	20
Repetitive Peak Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_{DC}	V		20	40	60	80	100	120	150	200
Maximum RMS Voltage	V_{RMS}	V		14	28	42	56	70	84	105	140
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, FIG.1	5.0							
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, Ta=25 °C	150							
Junction Temperature	T_J	°C		-55~+150							
Storage Temperature	T_{STG}	°C		-55 ~ +150							

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

Item	Symbol	Unit	Test Condition		SS5							
					2	4	6	8	10	12	15	20
Peak Forward Voltage	V _F	V	I _F =5.0A		0.55		0.70		0.85			
Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	T _a =25℃	1.0							
	T _a =100℃			50								
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		45							

(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

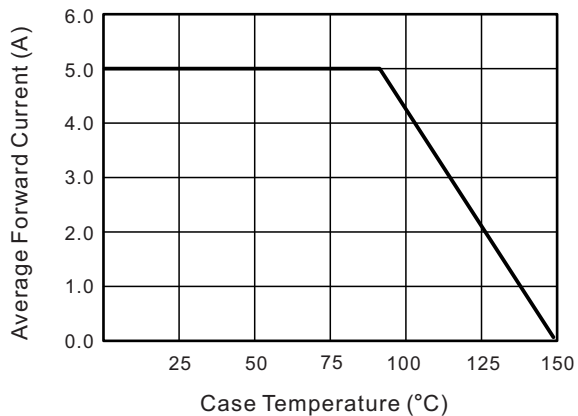


Fig.2 Typical Reverse Characteristics

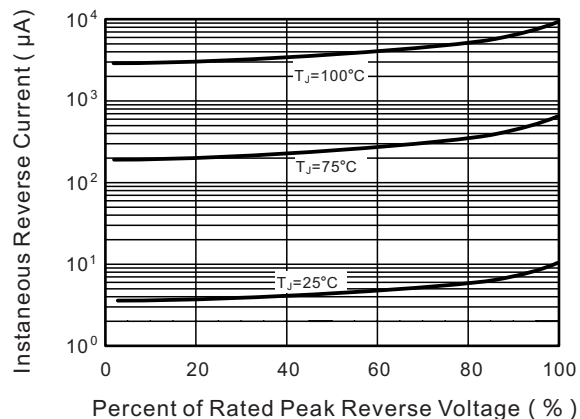


Fig.3 Typical Forward Characteristic

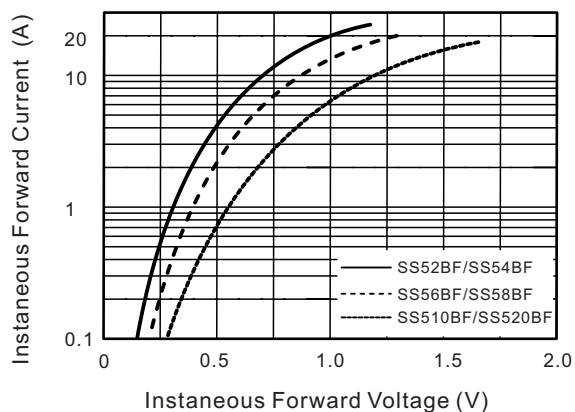


Fig.4 Typical Junction Capacitance

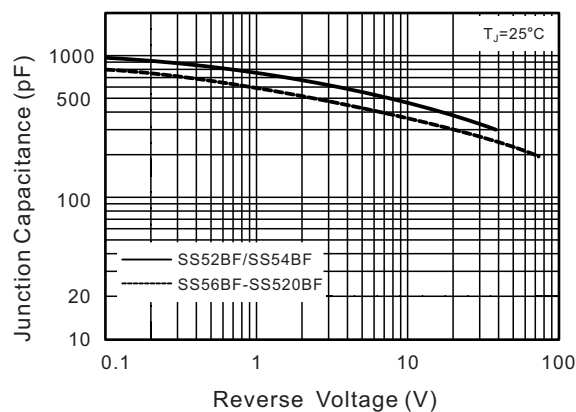


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

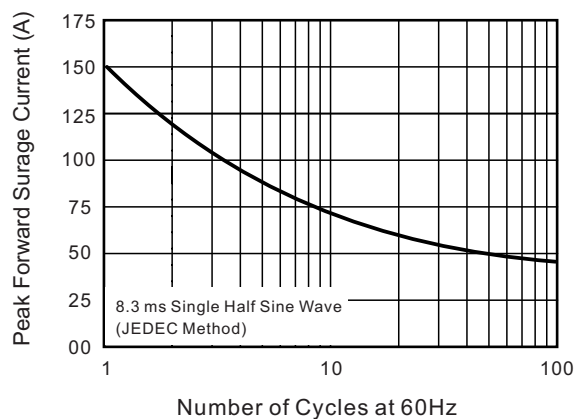
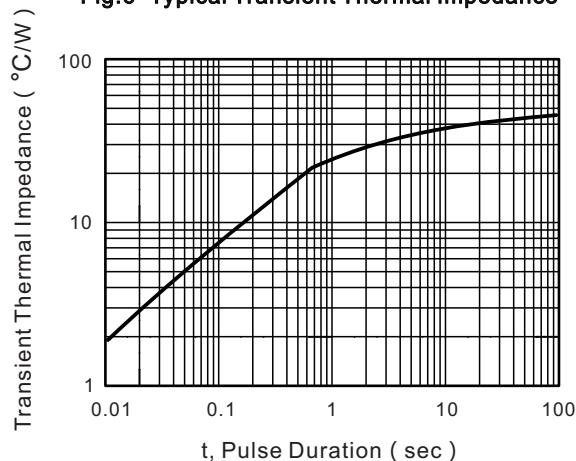


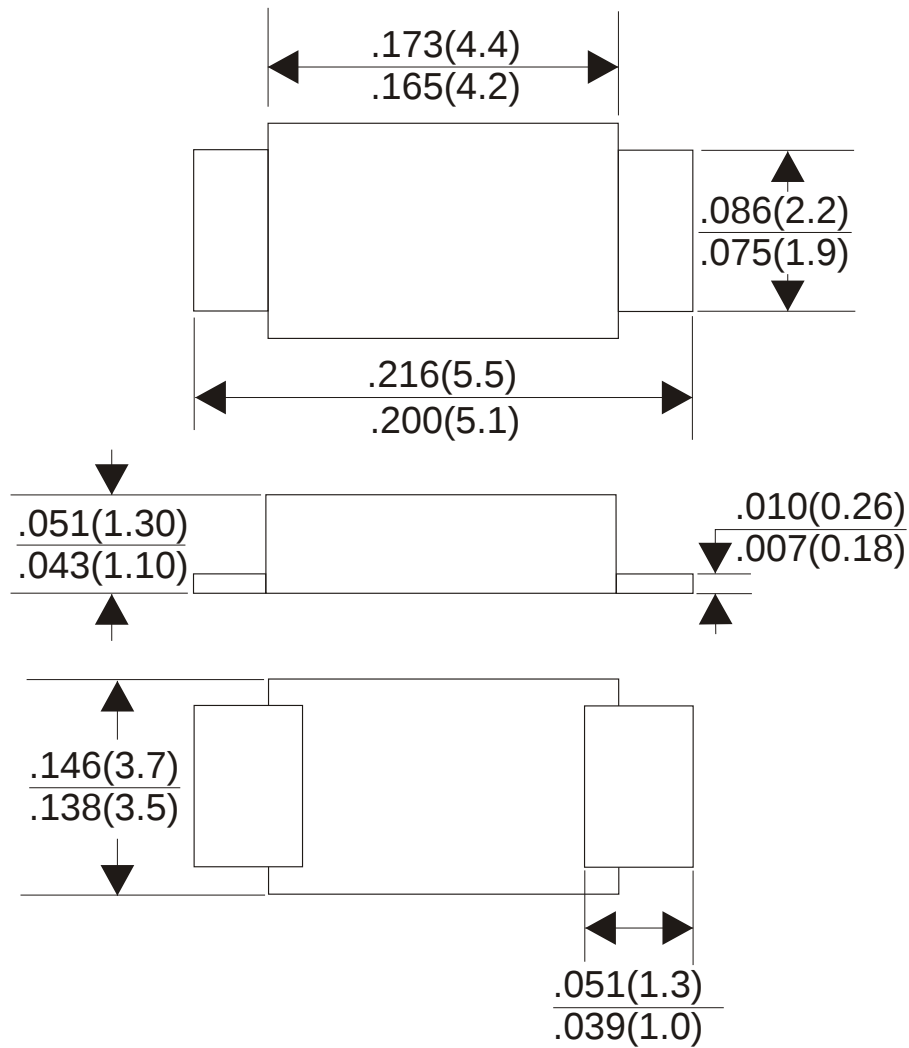
Fig.6- Typical Transient Thermal Impedance





Package Outline Dimensions

SMBF



Dimensions in inches and (millimeters)



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