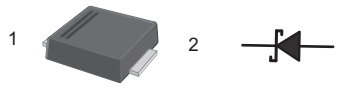
Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 20 to 200V
Forward Current - 3.0A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Simplified outline SMBF and symbol

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: 57mg / 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	SS32BF	SS34BF	SS345BF	SS36BF	SS38BF	SS310BF	SS312BF	SS315BF	SS320BF	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	45	60	80	100	120	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	32	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	45	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0									A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	80									A
Max Instantaneous Forward Voltage at 3 A	V_F	0.55			0.70		0.85		0.95		V
Maximum DC Reverse Current T_a = 25°C at Rated DC Reverse Voltage T_a =100°C	I_R	0.5 5			0.3 3						mA
Typical Junction Capacitance (1)	C_j	450			400						pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	65									°C/W
Operating Junction Temperature Range	T_j	-55 ~ +150									°C
Storage Temperature Range	T_{stg}	-55 ~ +150									°C

(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.

Fig.1 Forward Current Derating Curve

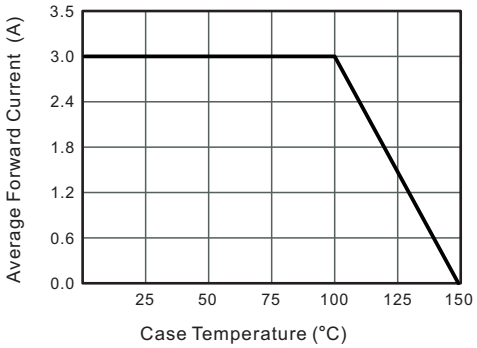


Fig.2 Typical Reverse Characteristics

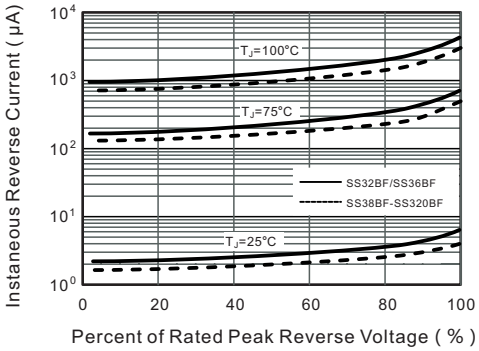


Fig.3 Typical Forward Characteristic

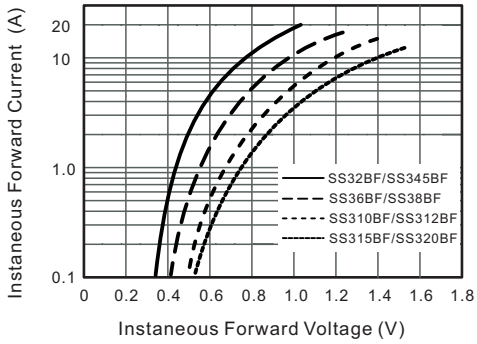


Fig.4 Typical Junction Capacitance

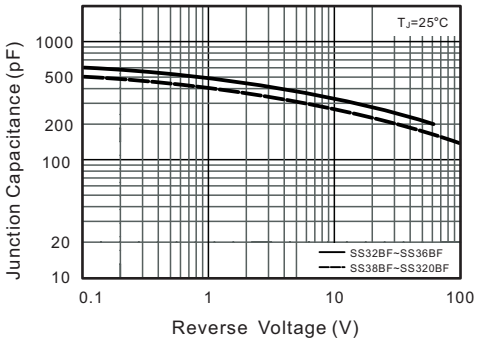


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

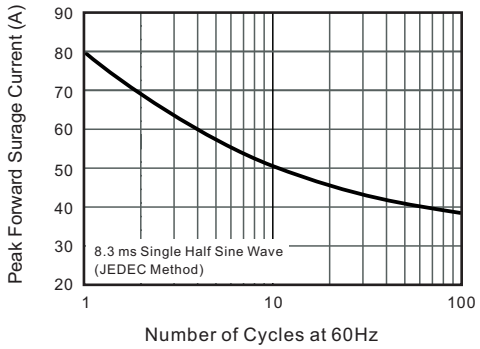
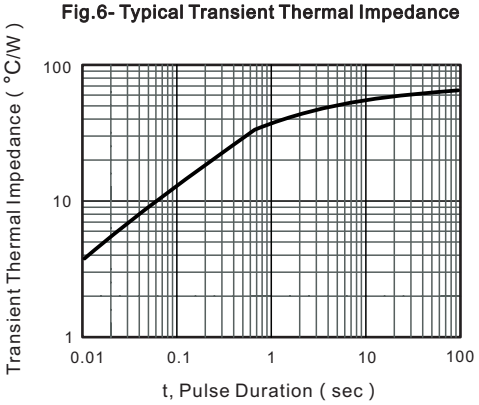
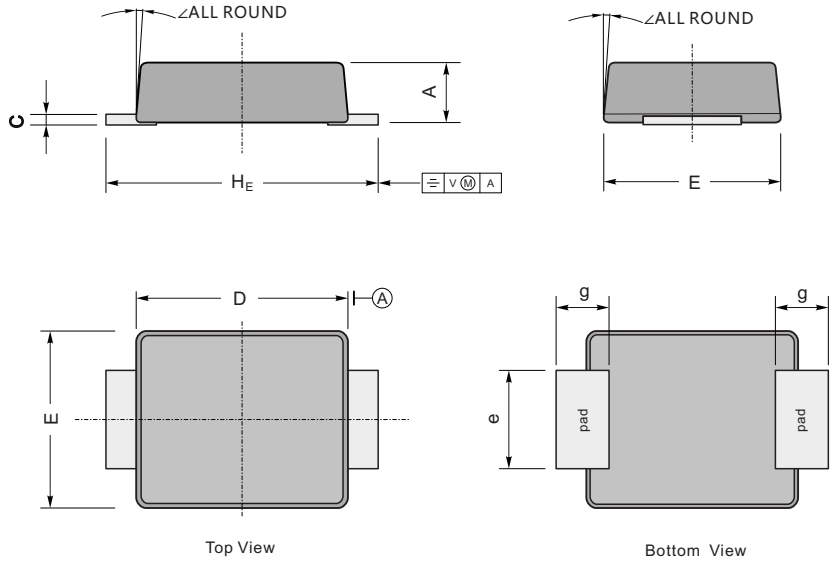


Fig.6- Typical Transient Thermal Impedance



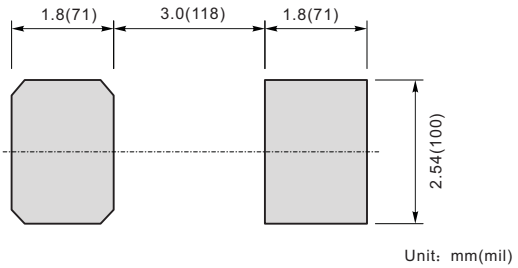
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	H_E	e	g	∠
mm	max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	9°
	min	1.1	0.18	4.2	3.5	5.1	1.9		
mil	max	51	10	173	146	216	86	40	
	min	43	7	165	138	200	75		

The recommended mounting pad size



Unit：mm(mil)

Marking

Type number	Marking code
SS32BF	S32B
SS34BF	S34B
SS345BF	S345B
SS36BF	S36B
SS38BF	S38B
SS310BF	S310B
SS312BF	S312B
SS315BF	S315B
SS320BF	S320B