SS52BGF~SS520BGF

ROHS

Surface Mount Schottky Barrier Rectifier

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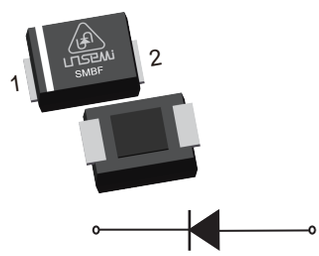
Features

- ◆ 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
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Approx. Weight : 57mg/0.002oz
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

SMBF



1：Cathode
2：Anode

Maximum Ratings and Electrical Characteristics

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

Parameter		Symbol	SS52 BGF	SS54 BGF	SS56 BGF	SS58 BGF	SS510 BGF	SS512 BGF	SS515 BGF	SS520 BGF	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage		V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage		V_{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	5.0								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	120								A
Max Instantaneous Forward Voltage at 5A		V_F	0.55		0.70		0.85				V
Maximum DC Reverse Current at Rated DC Reverse Voltage	Ta=25℃	I_R	1.0								mA
	Ta=100℃	I_R	50								
Typical Junction Capacitance (1)		Cj	800		500						pF
Typical Thermal Resistance (2)		$R_{\theta JA}$	45								℃/W
Operating Junction Temperature Range		T_J	-55 ~ +150								℃
Storage Temperature Range		Tstg	-55 ~ +150								℃

Note:(1) Measured at 1 MHz and applied reverse voltage of 4VDC.
(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5cm) copper pad areas.

Electrical Characteristics Curves

Fig.1 Forward Current Derating Curve

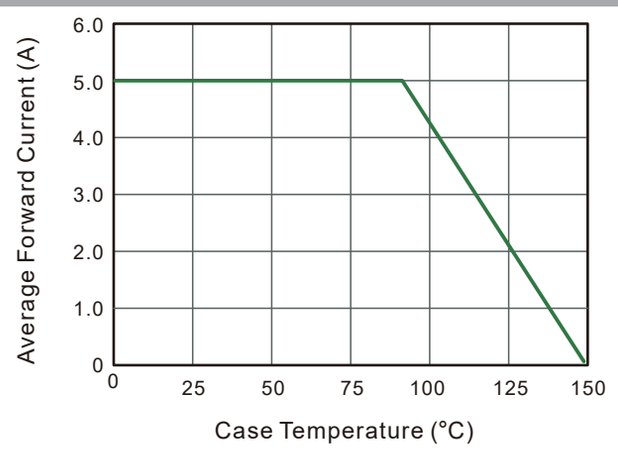


Fig. 2 Typical Reverse Characteristics

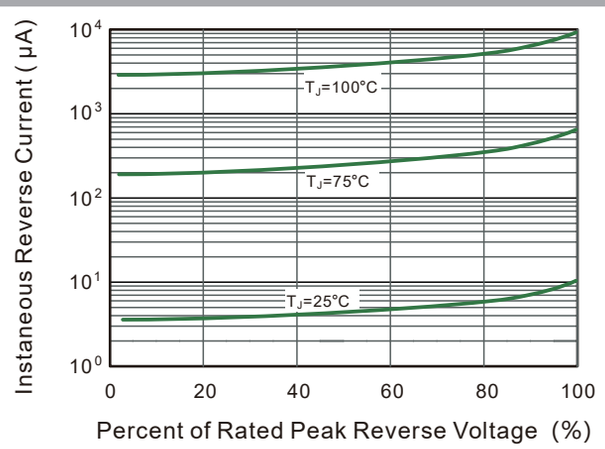


Fig.3 Typical Forward Characteristic

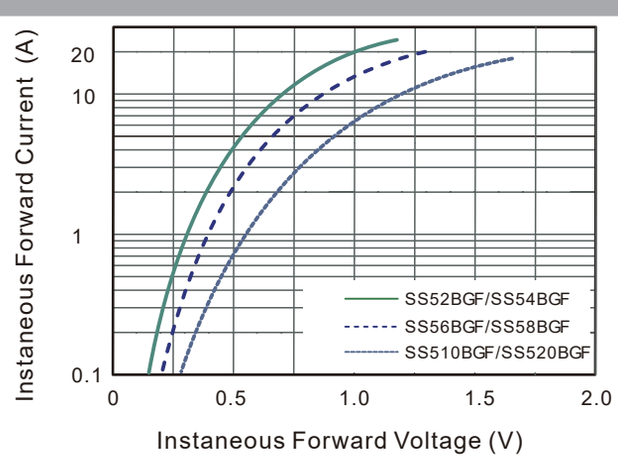


Fig. 4 Typical Junction Capacitance

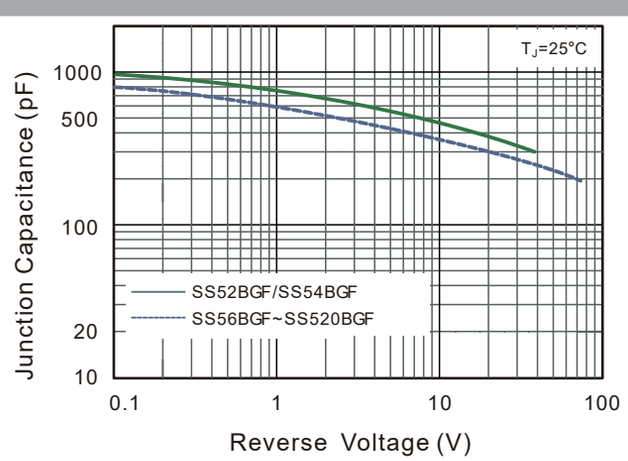


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

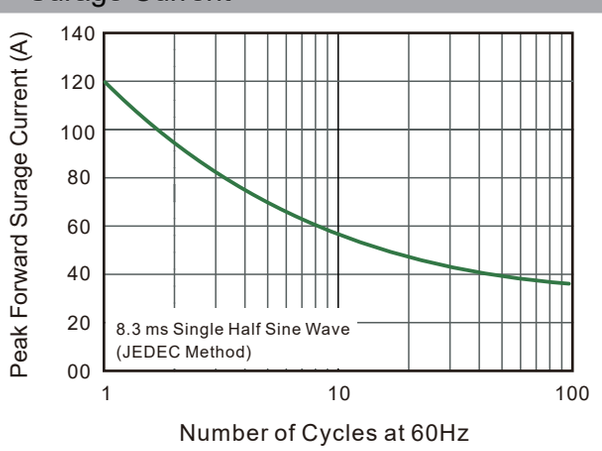
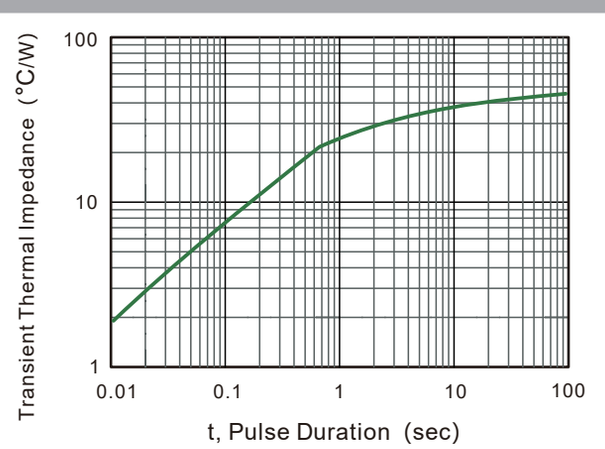
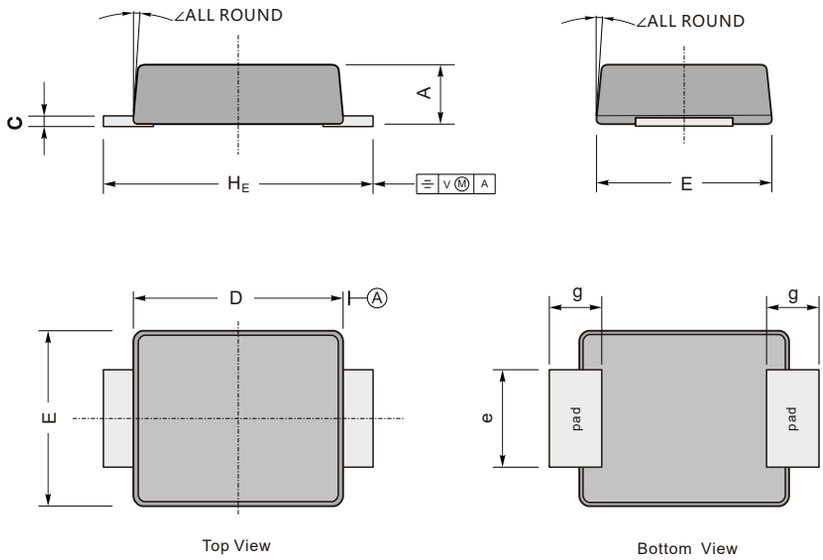


Fig. 6 Typical Transient Thermal Impedance



Package Outline & Dimensions



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		

Marking

Type Number	SS52BGF	SS54BGF	SS56BGF	SS58BGF	SS510BGF	SS512BGF	SS515BGF	SS520BGF
Making	S52B	S54B	S56B	S58B	S510B	S512B	S515B	S520B

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