SS52BG~SS520BG

ROHS

Surface Mount Schottky Barrier Rectifier

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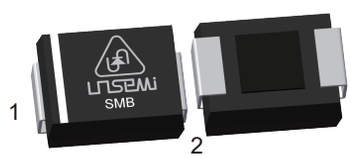
Features

- ◆ 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: SMB
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Approx. Weight : 0.095g / 0.003oz
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

SMB



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 BG	SS54 BG	SS56 BG	SS58 BG	SS510 BG	SS512 BG	SS515 BG	SS520 BG	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}	150								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		0.3						mA
	Ta=100℃	I_R	50		25						
Typical Junction Capacitance (1)		Cj	500		300						pF
Typical Thermal Resistance (2)		$R_{\theta JA}$	50								℃/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

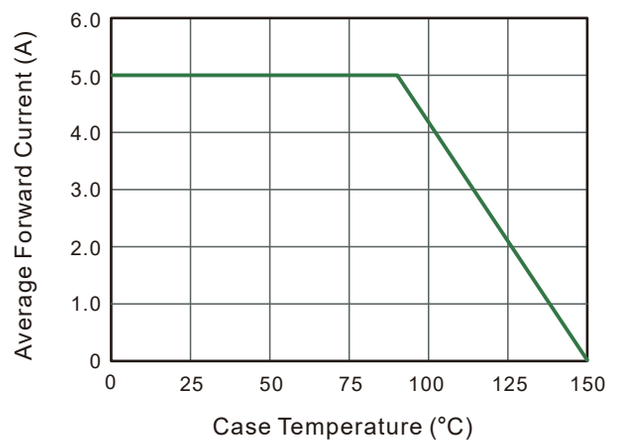


Fig. 2 Typical Reverse Characteristics

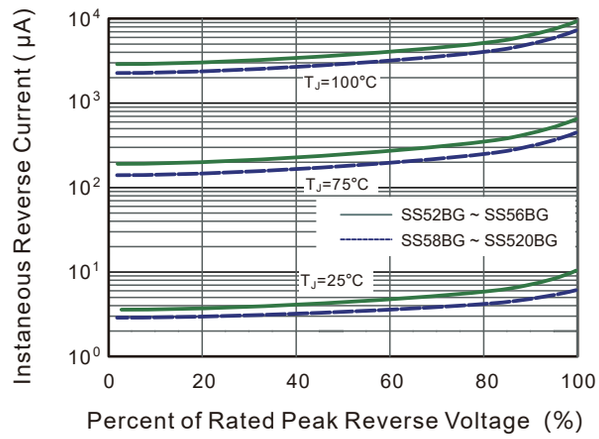


Fig.3 Typical Forward Characteristic

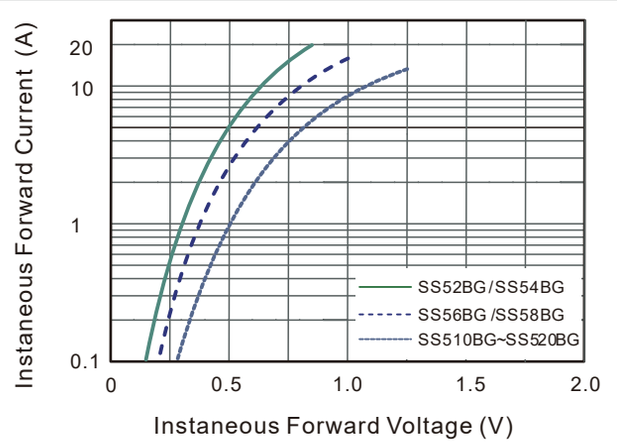


Fig. 4 Typical Junction Capacitance

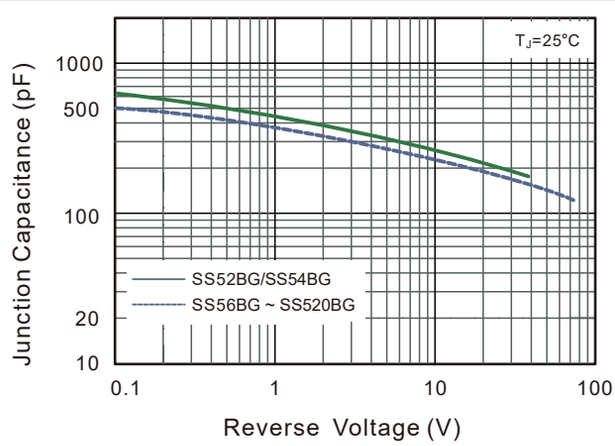


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

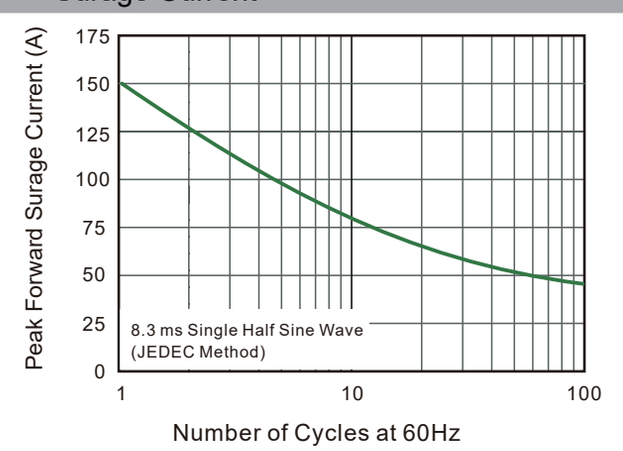
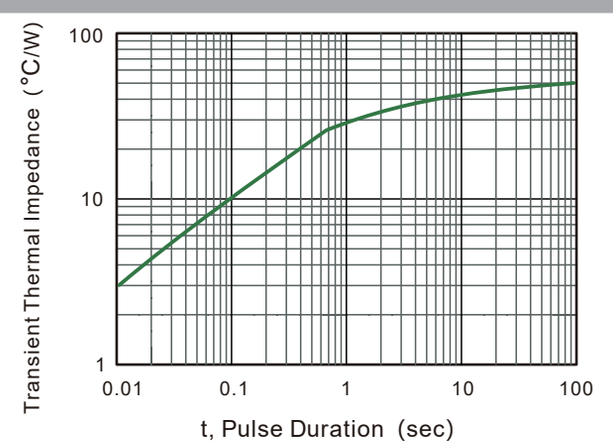
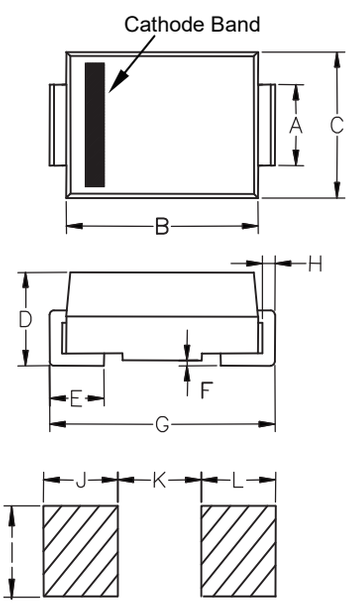


Fig. 6 Typical Transient Thermal Impedance



Package Outline & Dimensions

DO-214AA (SMB)



Dimensions	Inches		Millimeters	
	Min	Max	Min	Max
A	0.077	0.087	1.960	2.200
B	0.171	0.191	4.350	4.850
C	0.130	0.155	3.300	3.940
D	0.084	0.096	2.130	2.440
E	0.030	0.060	0.750	1.520
F	-	0.008	-	0.203
G	0.201	0.216	5.100	5.500
H	0.006	0.012	0.152	0.305
I	0.089	-	2.260	-
J	0.085	-	2.160	-
K	-	0.107	-	2.740
L	0.085	-	2.160	-

Marking

Type Number	SS52BG	SS54BG	SS56BG	SS58BG	SS510BG	SS512BG	SS515BG	SS520BG
Making	SS52	SS54	SS56	SS58	SS510	SS512	SS515	SS520

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ROHS

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