SS52G~SS520G

ROHS

Surface Mount Schottky Barrier Rectifier

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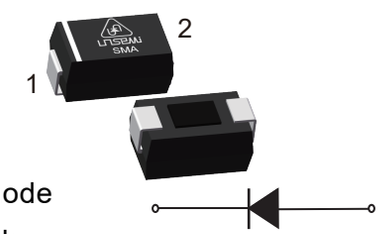
Features

- ◆ 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

SMA



1: Cathode
2: Anode

Mechanical Data

- ◆ Case: SMA
- ◆ Quantity Per Reel : 2,000pcs
- ◆ Approx. Weight : 60mg / 0.0021oz
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

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	SS52G	SS54G	SS56G	SS58G	SS510G	SS512G	SS515G	SS520G	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	500		300						pF
Typical Thermal Resistance (2)		$R_{\theta JA}$	60								℃/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

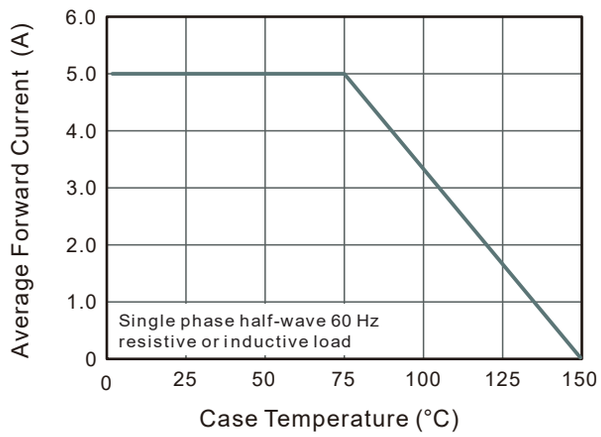


Fig. 2 Typical Reverse Characteristics

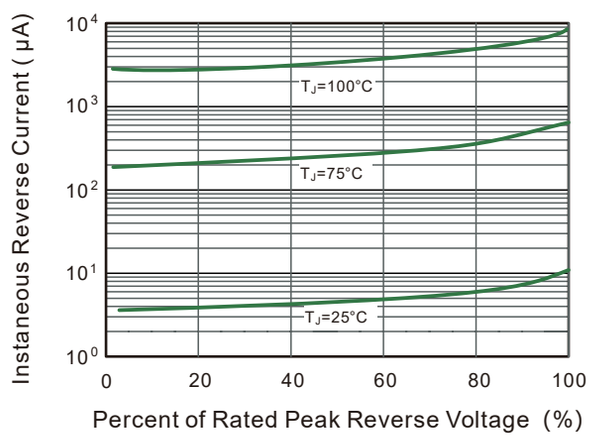


Fig.3 Typical Forward Characteristic

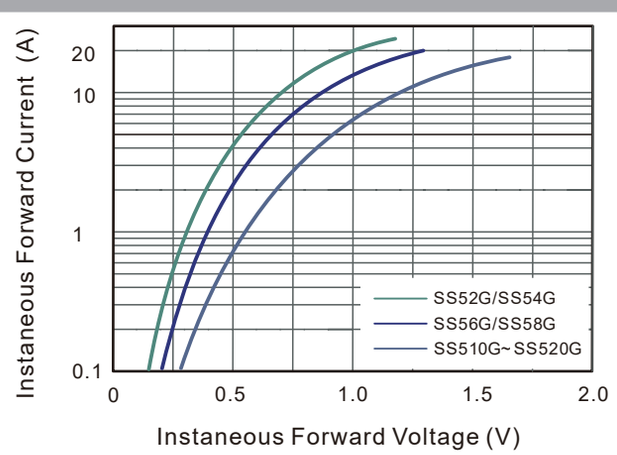


Fig. 4 Typical Junction Capacitance

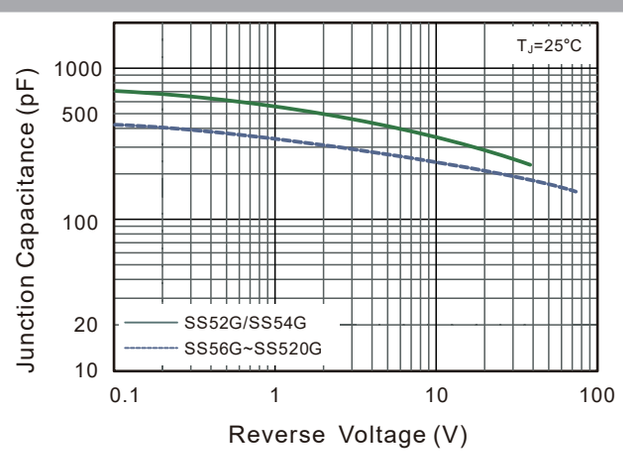


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

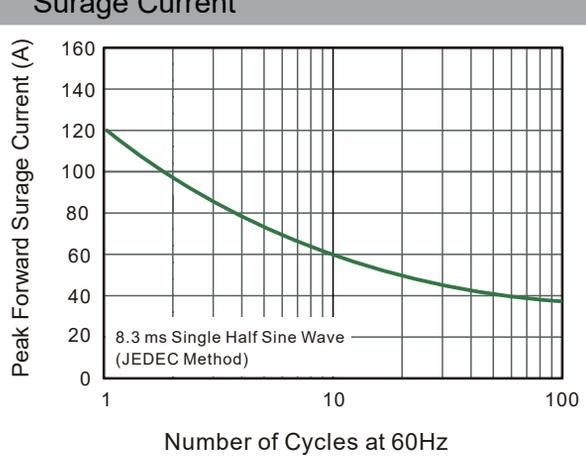
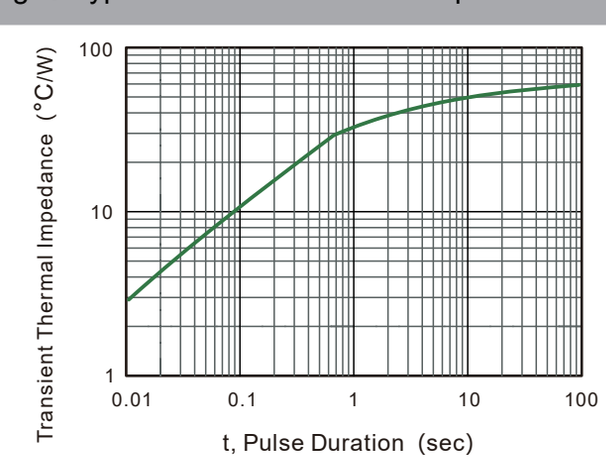
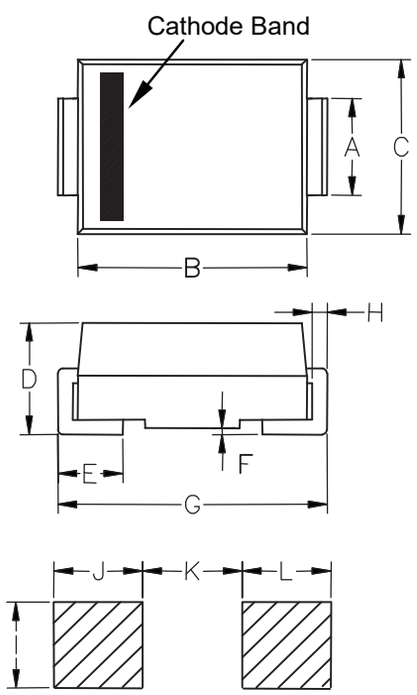


Fig. 6 Typical Transient Thermal Impedance



Package Outline & Dimensions

DO-214AC (SMA)



Dimensions	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	0.049	0.064	1.230	1.630
B	0.162	0.179	4.10	4.550
C	0.099	0.109	2.510	2.760
D	0.077	0.089	1.960	2.260
E	0.030	0.060	0.750	1.510
F	-	0.008	-	0.203
G	0.192	0.206	4.87	5.220
H	0.006	0.012	0.152	0.305
I	0.070	-	1.800	-
J	0.082	-	2.100	-
K	-	0.090	-	2.300
L	0.082	-	2.100	-

Marking

Type Number	SS52G	SS54G	SS56G	SS58G	SS510G	SS512G	SS515G	SS520G
Making	SS52	SS54	SS56	SS58	SS510	SS512	SS515	SS520

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