

# SS52CG~SS520CG

ROHS

## Surface Mount Schottky Barrier Rectifier



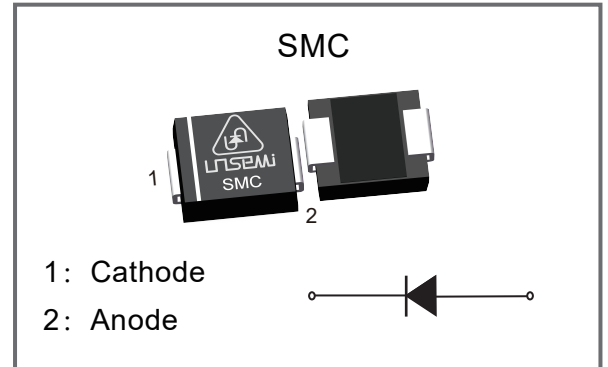
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### Features

- ◆ 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: SMC
- ◆ Quantity Per Reel : 3,000pcs
- ◆ Approx. Weight : 0.22g / 0.0077oz
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026



### 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 current derate by 20%.

Parameter	Symbol	SS52 CG	SS54 CG	SS56 CG	SS58 CG	SS510 CG	SS512 CG	SS515 CG	SS520 CG	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	VRMS	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	VDC	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	IF(AV)	5.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	175				150				A
Max Instantaneous Forward Voltage at 5A	VF	0.55	0.70		0.85				V	
Maximum DC Reverse Current at Rated DC Reverse Voltage	Ta=25°C	1.0								mA
	Ta=100°C	50								
Typical Junction Capacitance <sup>(1)</sup>	Cj	600	400							pF
Typical Thermal Resistance <sup>(2)</sup>	R <sub>θJA</sub>	35								°C/W
Operating Junction Temperature Range	TJ	-55 ~ +150								°C
Storage Temperature Range	Tstg	-55 ~ +150								°C

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

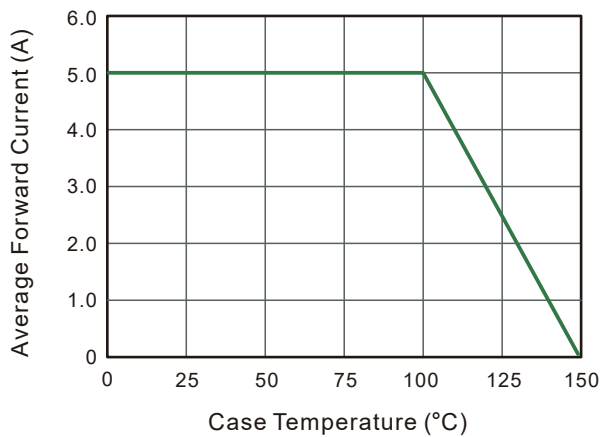


Fig. 2 Typical Reverse Characteristics

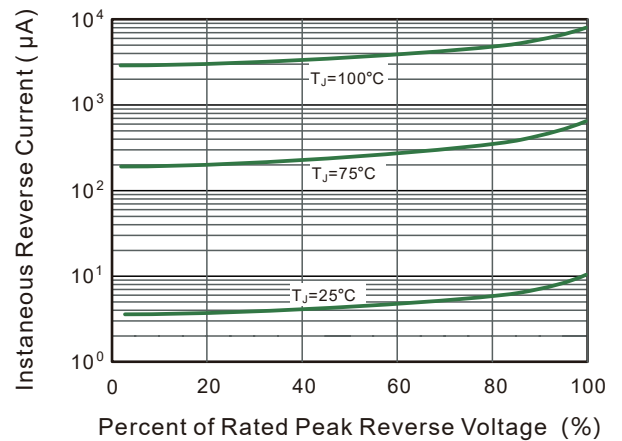


Fig.3 Typical Forward Characteristic

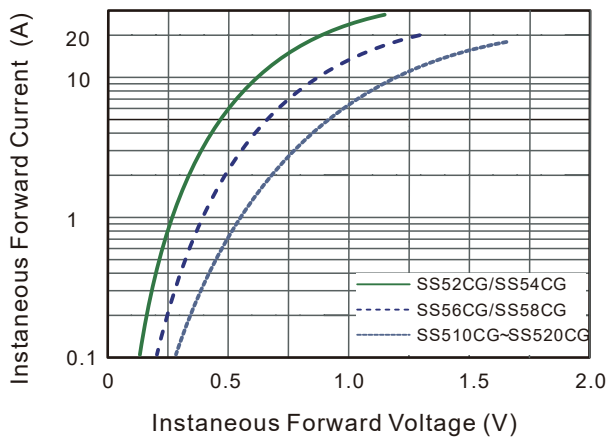


Fig. 4 Typical Junction Capacitance

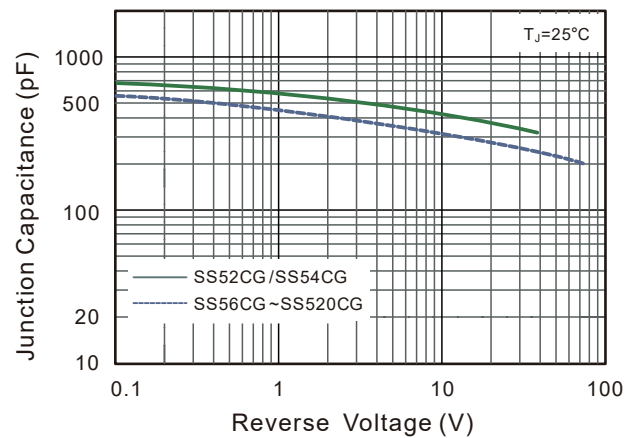


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

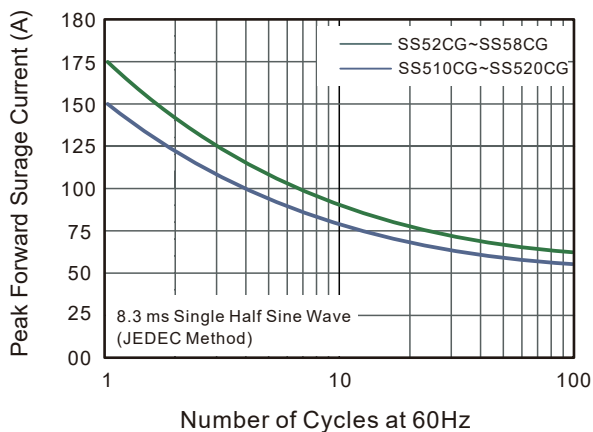
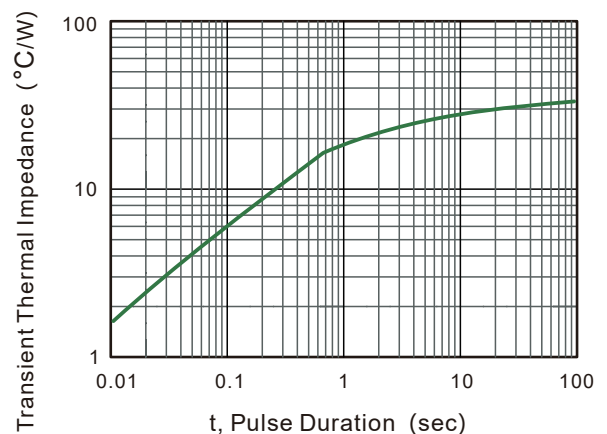
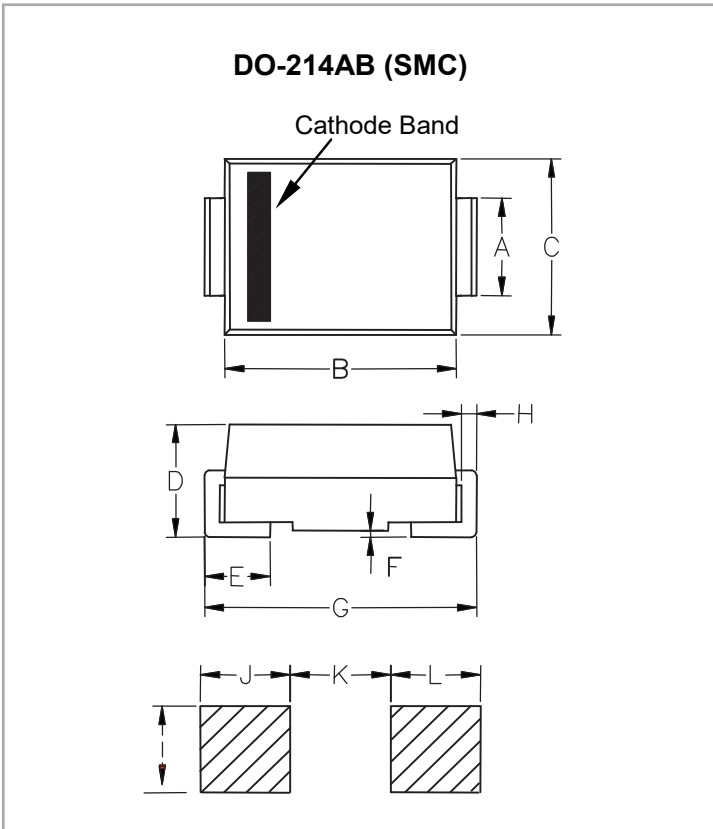


Fig. 6 Typical Transient Thermal Impedance



**Package Outline & Dimensions**



Dimensions	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	0.114	0.126	2.86	3.160
B	0.260	0.280	6.520	7.020
C	0.220	0.245	5.520	6.150
D	0.079	0.103	1.980	2.590
E	0.030	0.060	0.750	1.510
F	-	0.008	-	0.203
G	0.305	0.320	7.640	8.020
H	0.006	0.012	0.152	0.305
I	0.129	-	3.300	-
J	0.094	-	2.400	-
K	-	0.165	-	4.200
L	0.094	-	2.400	-

**Marking**

Type Number	SS52CG	SS54CG	SS56CG	SS58CG	SS510CG	SS512CG	SS515CG	SS520CG
Making	SS52	SS54	SS56	SS58	SS510	SS512	SS515	SS520

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