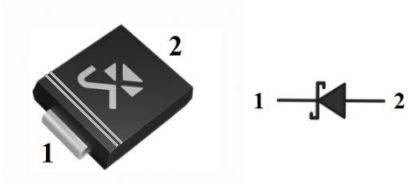
SS52CG THRU SS520CG

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20V to 200V
Forward Current - 5A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SMC 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

Absolute 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,derate by 20%

Parameter	Symbol	SS52 CG	SS54 CG	SS56 CG	SS58 CG	SS510 CG	SS512 CG	SS515 CG	SS520 CG	Unit
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}	125								A
Max Instantaneous Forward Voltage at 8A	V_F	0.55		0.70	0.85		0.95			V
Maximum DC Reverse Current T_A=25℃	I_R	1.0								mA
at Rated DC Reverse Voltage T_A=100℃		50								
Typical Junction Capacitance(1)	C_J	600		400						pF
Typical Thermal Resistance(2)	$R_{\theta JA}$	35								℃/W
Operating Junction Temperature Range	T_j	-55~+125								℃
Storage Temperature Range	T_{stg}	-55~+150								℃

(1)Measured at 1MHz and applied reverse voltage of 4V D.C
(2)P.C.B. mounted with 2.0"x2.0"(5×5cm) copper pad areas

Typical Characteristics

Fig.1 Forward Current Derating Curve

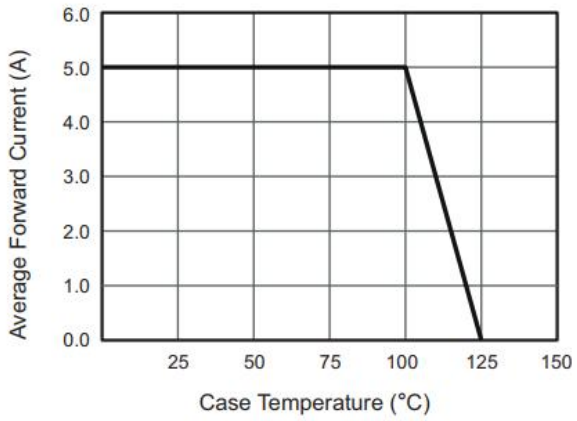


Fig.2 Typical Reverse Characteristics

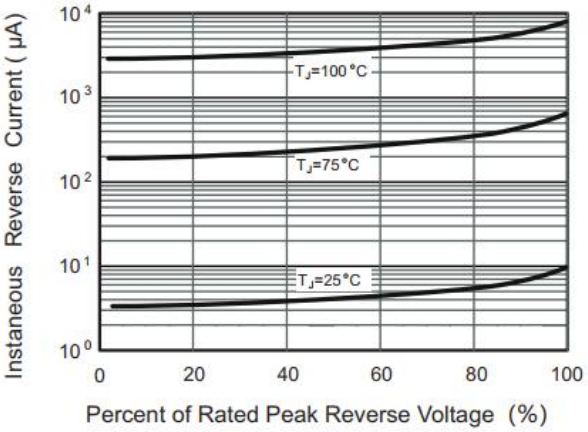


Fig.3 Typical Forward Characteristic

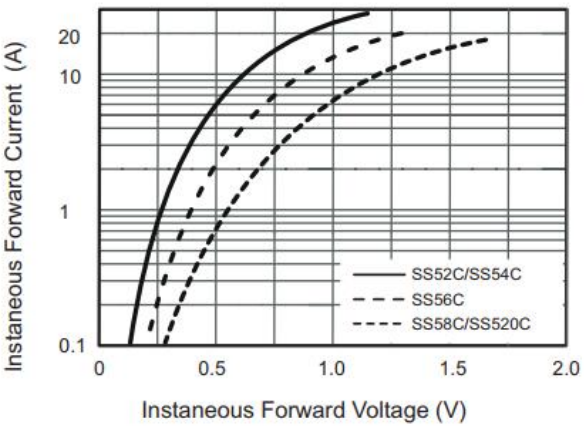


Fig.4 Typical Junction Capacitance

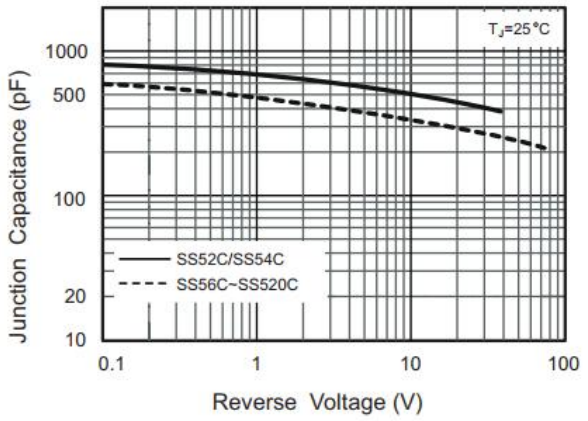


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

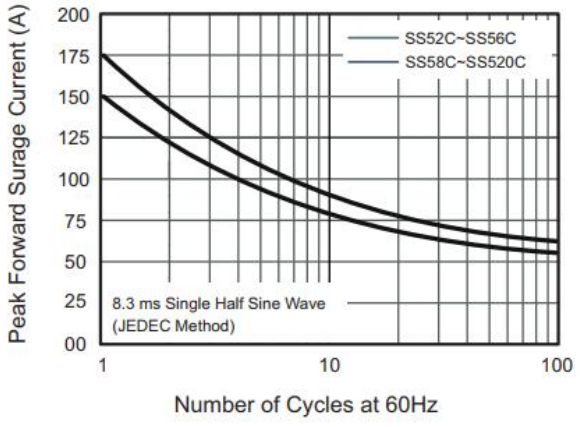
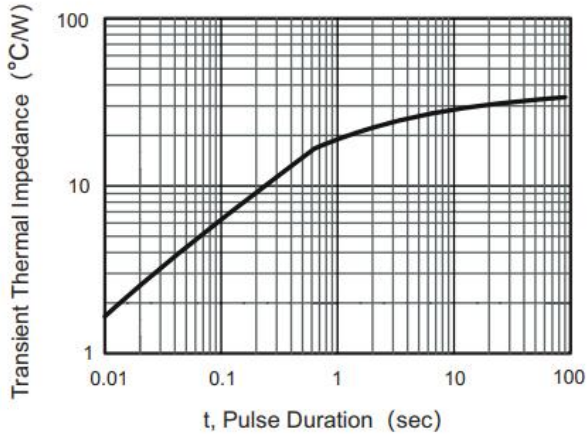


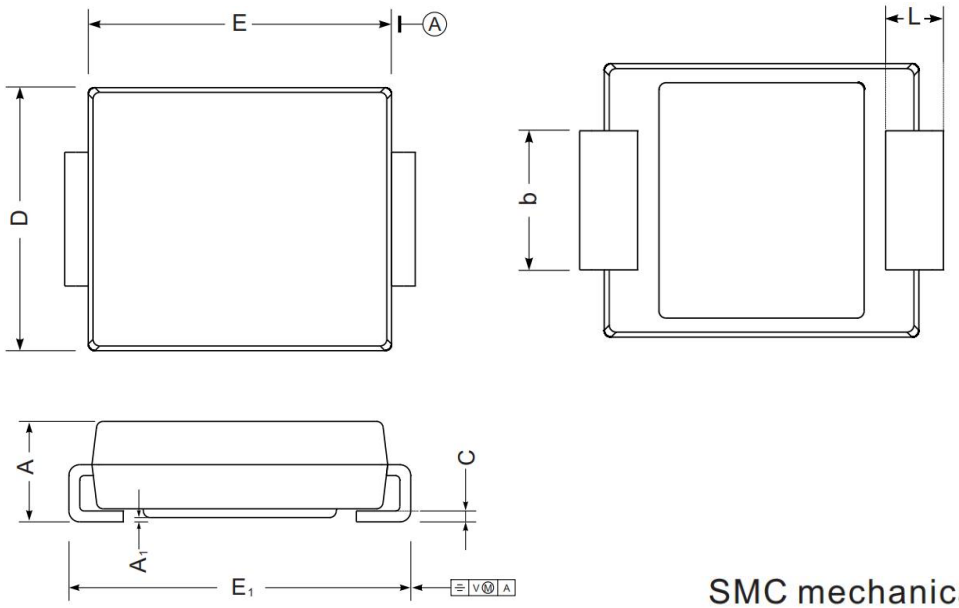
Fig.6- Typical Transient Thermal Impedance



Package Information

SMC

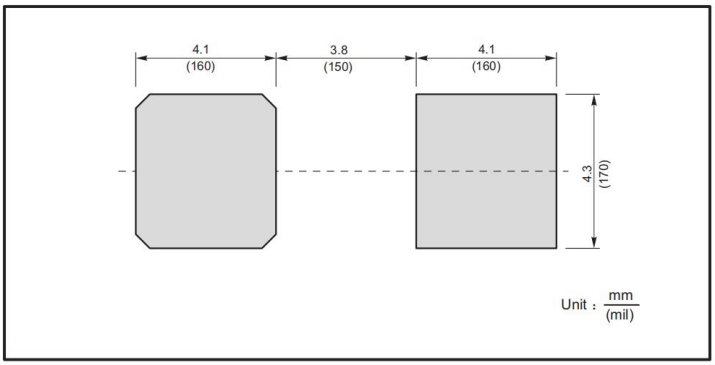
Dimensions in mm



SMC mechanical data

UNIT		A	E	D	E_1	A_1	C	L	b
mm	max	2.62	7.0	6.2	8.0	0.21	0.31	1.6	3.25
	min	2.00	6.5	5.6	7.6	0.05	0.15	0.9	2.75
mil	max	103	276	244	315	8.3	12	63	128
	min	79	256	220	299	2.0	5.9	35	108

The recommended mounting pad size



Marking

Type number	Marking code
SS52CG	SS52
SS54CG	SS54
SS56CG	SS56
SS58CG	SS58
SS510CG	SS510
SS512CG	SS512
SS515CG	SS515
SS520CG	SS520

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