



SS310LCG

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 100 V

Forward Current - 3.0A

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
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 217mg / 0.0077oz

Absolute Maximum Ratings

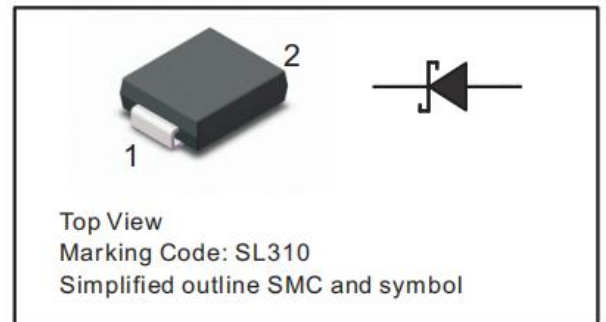
Ratings at ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbol	Limit	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	80	A
Max Instantaneous Forward Voltage at 3 A	V_F	0.6	V
Maximum DC Reverse Current, $T_A=25^{\circ}C$, at Rated DC Reverse Voltage	I_R	0.3	mA
Typical Junction Capacitance ⁽¹⁾	C_j	180	pF
Typical Thermal Resistance ⁽²⁾	R_{thJA}	70	$^{\circ}C/W$
Junction Temperature	T_J	-50~150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-50~150	$^{\circ}C$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 2.0" * 2.0" (5 * 5 cm) copper pad areas.

PIN	DESCRIPTION
1	Cathode
2	Anode





Typical Characteristics

Fig.1 Forward Current Derating Curve

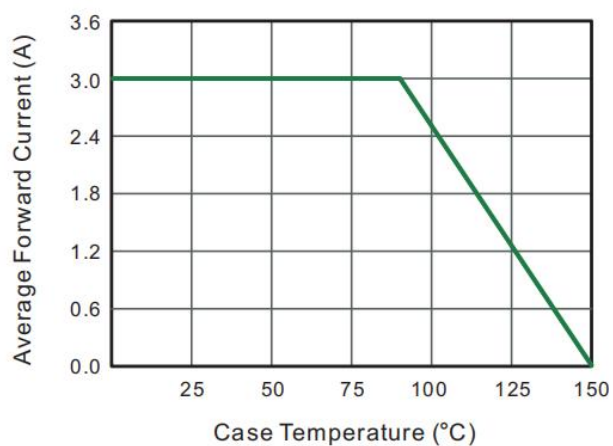


Fig.4 Typical Junction Capacitance

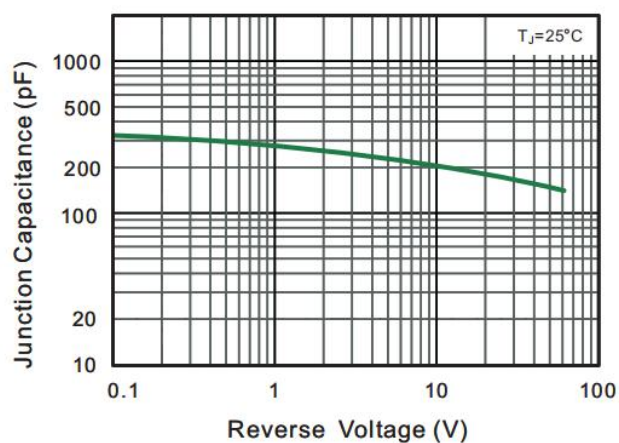


Fig.2 Typical Reverse Characteristics

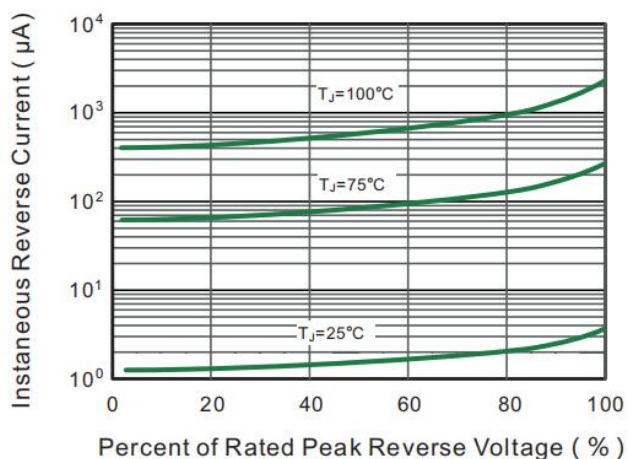


Fig.3 Typical Forward Characteristic

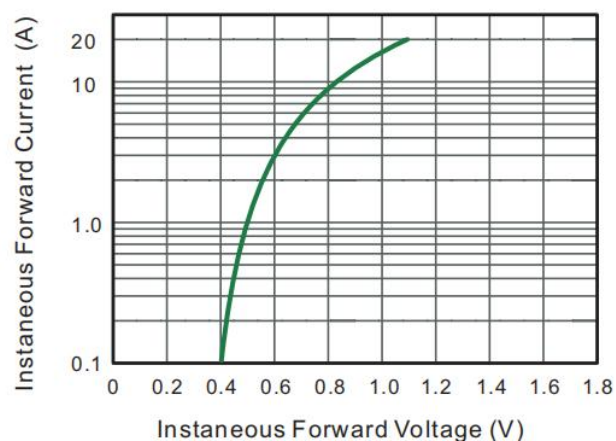


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

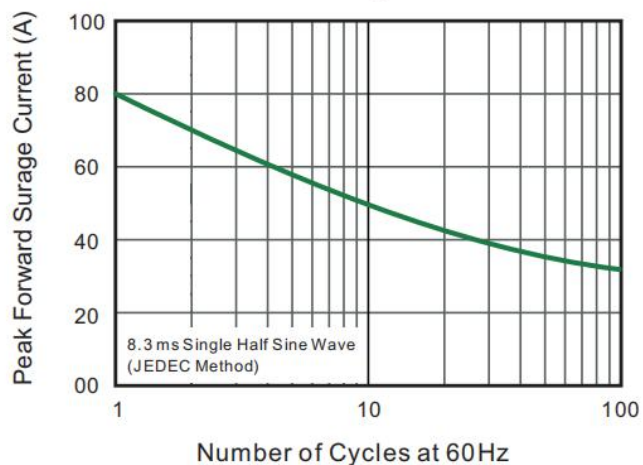
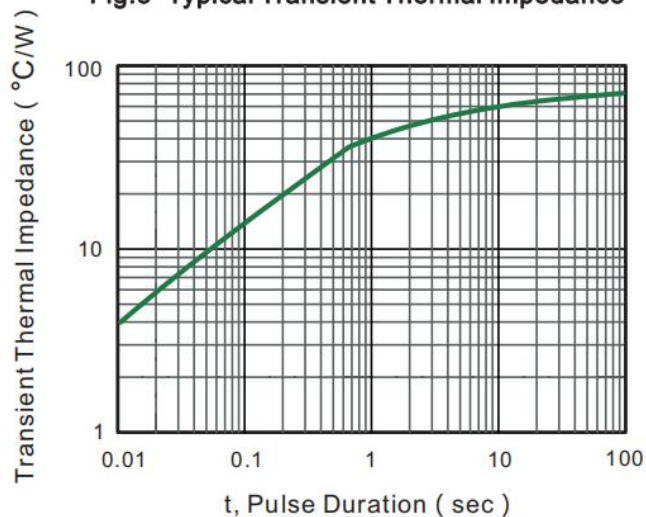


Fig.5- Typical Transient Thermal Impedance



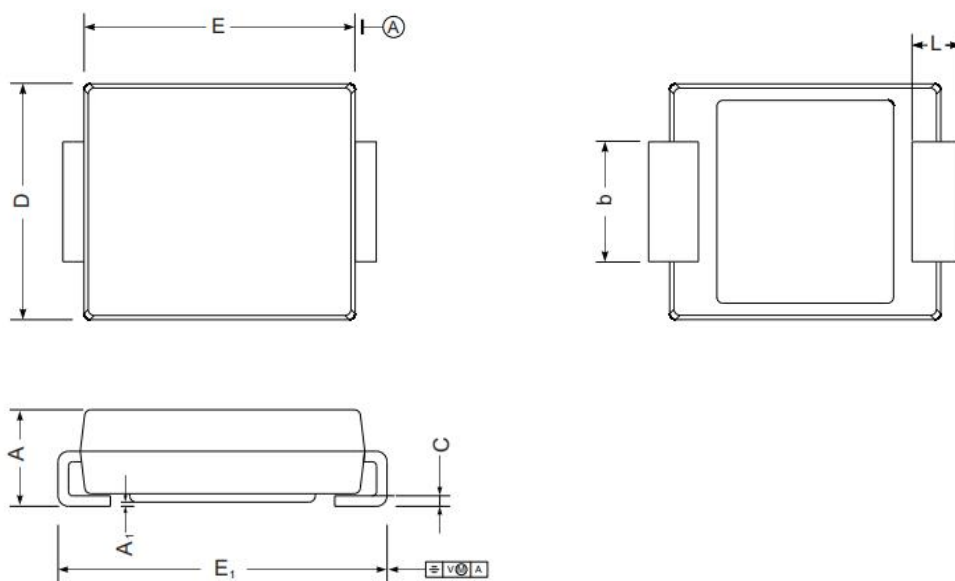


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Package Information

SMC

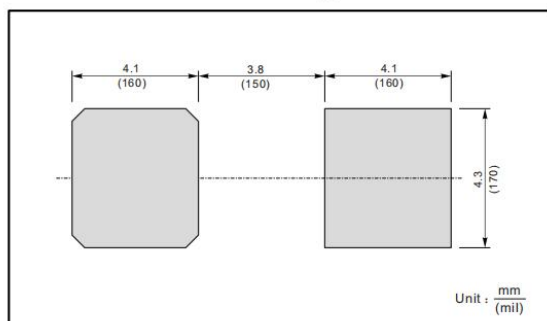
Dimensions in mm



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
SS310LCG	SL310