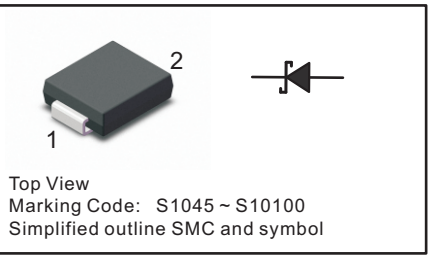
Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 45 to 100V
Forward Current - 10.0A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: S1045 ~ S10100
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

MECHANICAL DATA

- Case: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.22g / 0.0077oz

Absolute 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, derate by 20 %

Parameter	Symbols	SS1045C	SS1060C	SS10100C	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	60	100	V
Maximum RMS voltage	V_{RMS}	32	42	70	V
Maximum DC Blocking Voltage	V_{DC}	45	60	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10.0			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 @10.0 A	V_F	0.55	0.75	0.90	V
Maximum DC Reverse Current T_a = 25°C at Rated DC Reverse Voltage T_a =100°C	I_R	0.5 50			mA
Operating Junction Temperature Range	T_j	-55 ~ +125			°C
Storage Temperature Range	T_{stg}	-55 ~ +150			°C

Fig.1 Forward Current Derating Curve

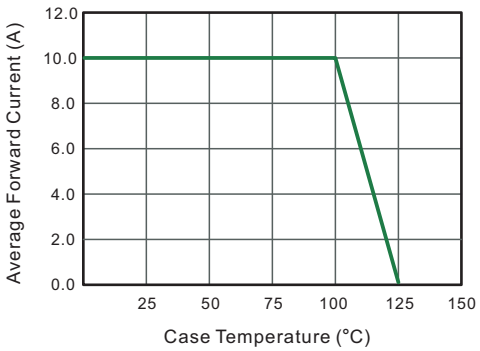


Fig.2 Typical Reverse Characteristics

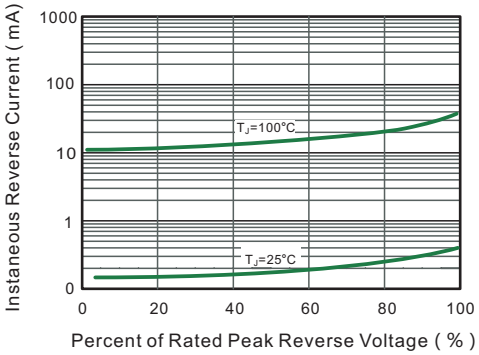


Fig.3 Typical Forward Characteristic

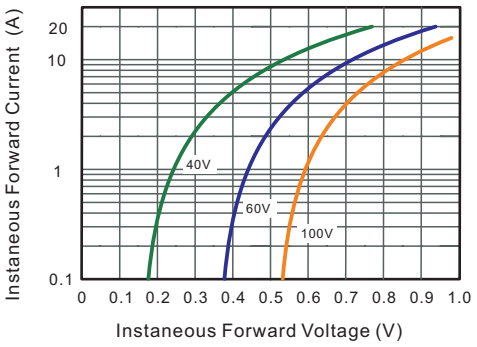
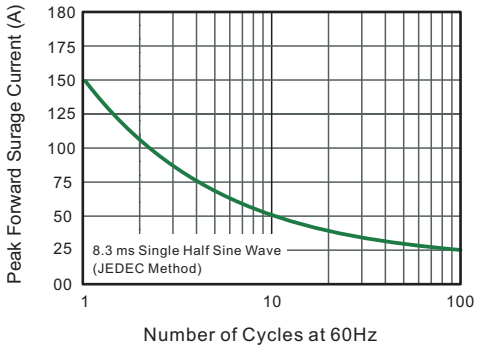
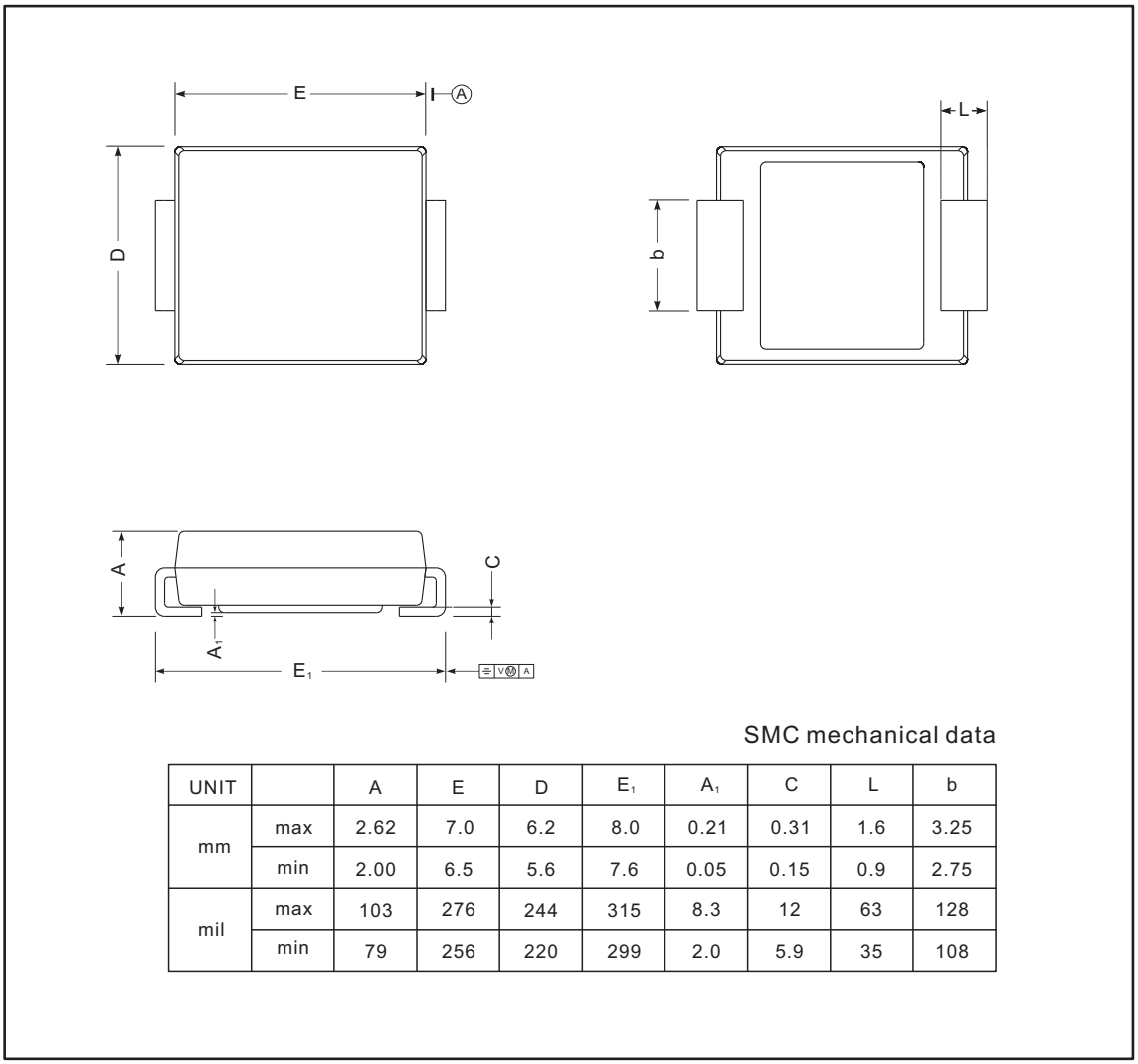


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current



PACKAGE OUTLINE

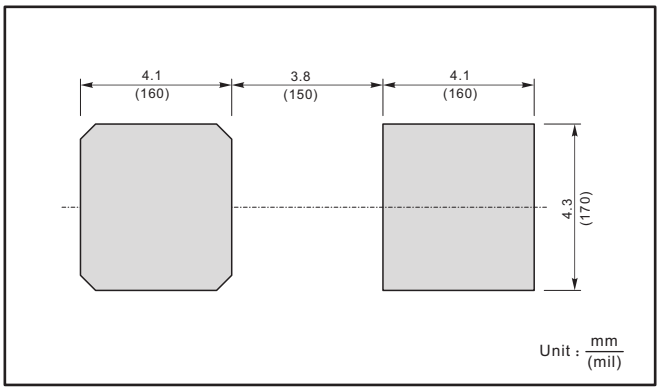
Plastic surface mounted package; 2 leads SMC



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
SS1045C	S1045
SS1060C	S1060
SS10100C	S10100