

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

FEATURES

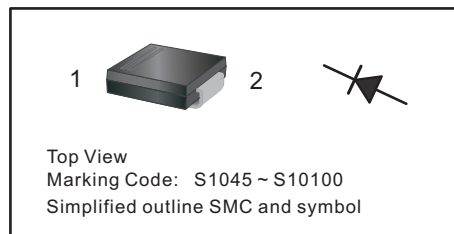
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

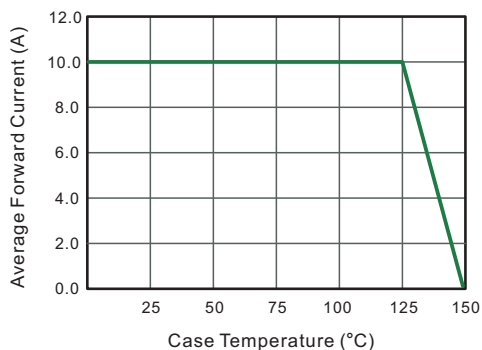
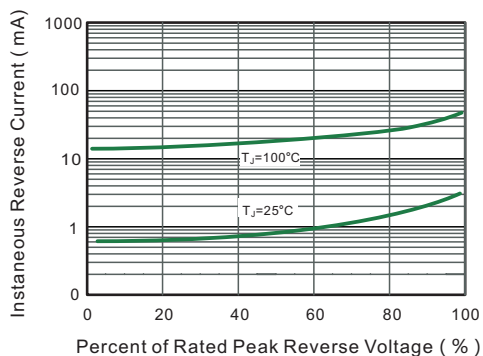
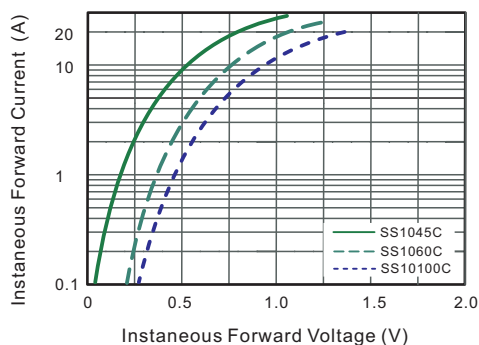
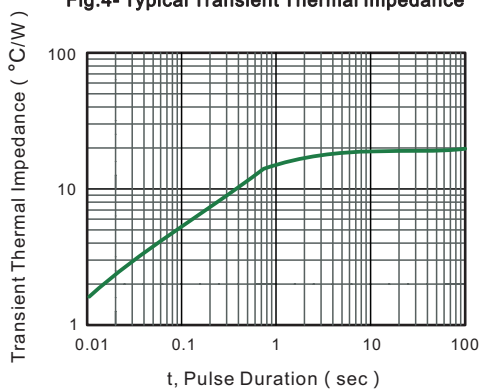
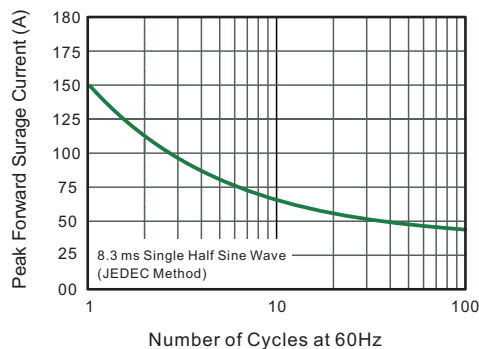


Absolute Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

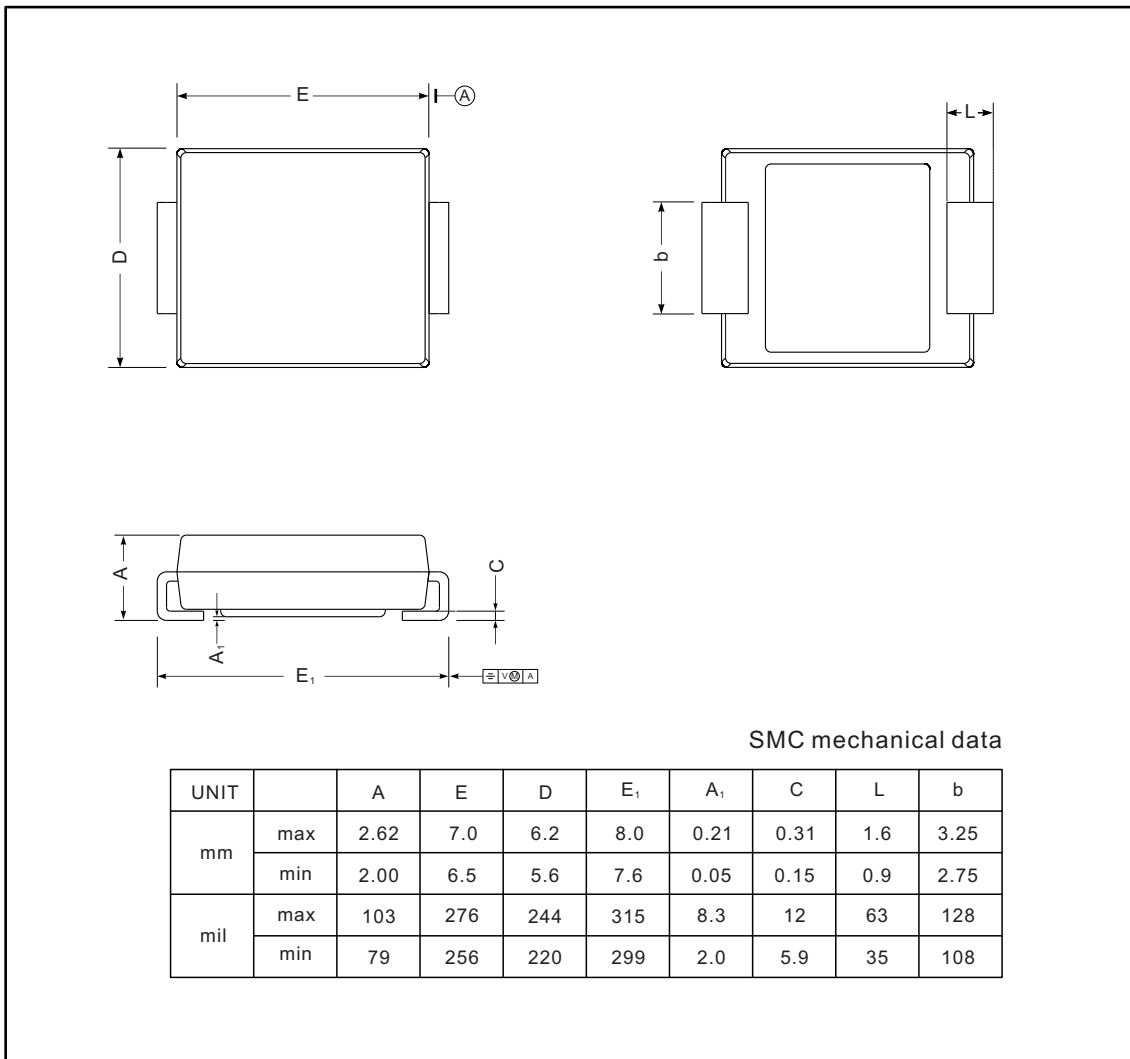
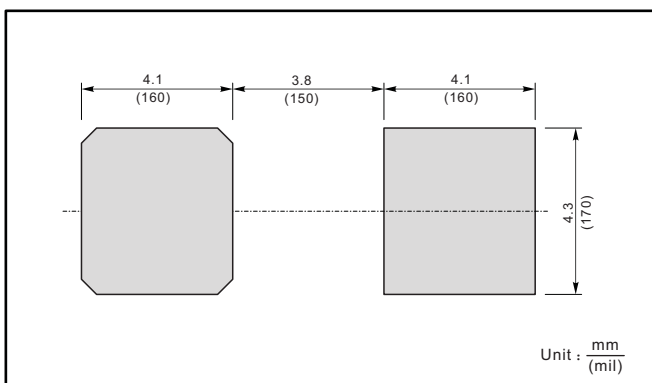
Parameter	Symbols	SS1045C	SS1060C	SS10100C	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	60	100	V
Maximum RMS voltage	V_{RMS}	32	42	70	V
Maximum DC Blocking Voltage	V_{DC}	45	60	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10.0			A
Peak Forward Surge Current, 8.3ms Single Half 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 $T_j = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_j = 100^\circ\text{C}$	I_R	0.5 50			mA
Typical Thermal Resistance	$R_{\theta JA}$	20			$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_j	-55 ~ +150			$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +150			$^\circ\text{C}$

(1) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Fig.1 Forward Current Derating Curve

Fig.2 Typical Reverse Characteristics

Fig.3 Typical Forward Characteristic

Fig.4- Typical Transient Thermal Impedance

Fig.5 Maximum Non-Repetitive Peak Forward Surge Current


PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMC

The recommended mounting pad size

Marking

Type number	Marking code
SS1045C	S1045
SS1060C	S1060
SS10100C	S10100