

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

Forward Current - 2.0A

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: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 60mg / 0.0021oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Marking Code: SS22~SS220

Simplified outline SMA and symbol

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	SS22	SS24	SS26	SS28	SS210	SS212	SS215	SS220	Units								
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	$I_{F(AV)}$	2.0								A								
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50								A								
Max Instantaneous Forward Voltage at 2 A	V_F	0.55		0.70		0.85		0.95		V								
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	I_R	0.5 5		0.3 3						mA								
Typical Junction Capacitance ⁽¹⁾	C_j	220		80						pF								
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	80								°C/W								
Operating Junction Temperature Range	T_j	-55 ~ +125								°C								
Storage Temperature Range	T_{stg}	-55 ~ +150								°C								

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

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

Fig.1 Forward Current Derating Curve

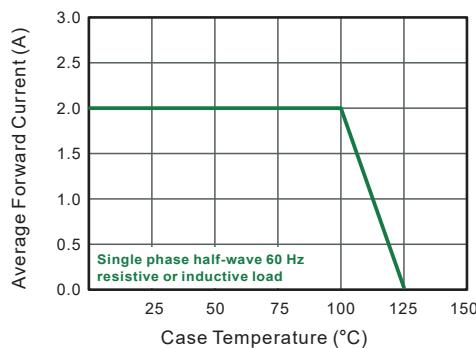


Fig.2 Typical Reverse Characteristics

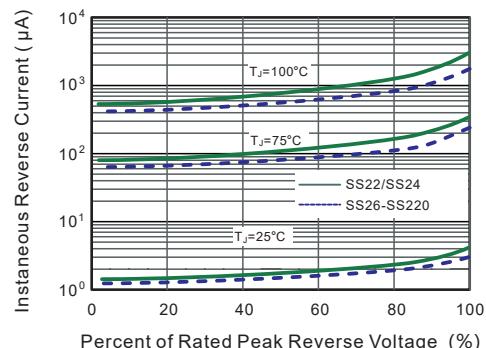


Fig.3 Typical Forward Characteristic

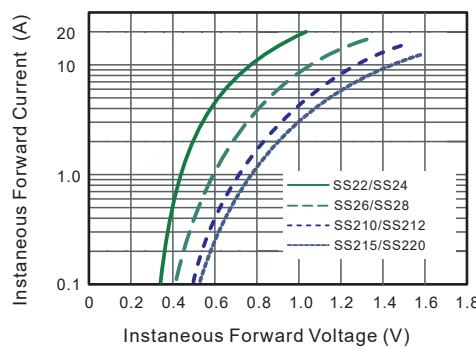


Fig.4 Typical Junction Capacitance

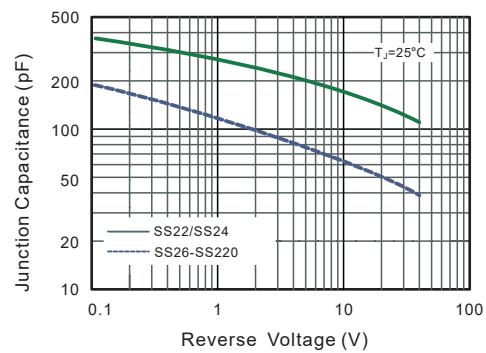


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

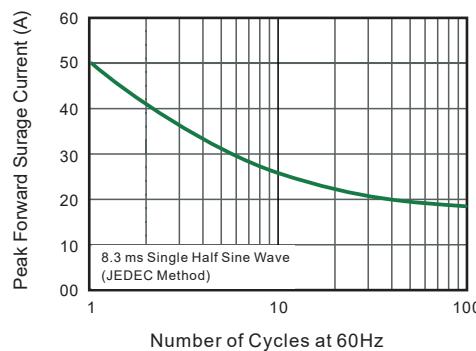
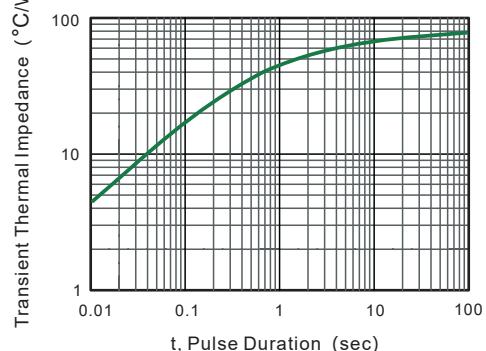


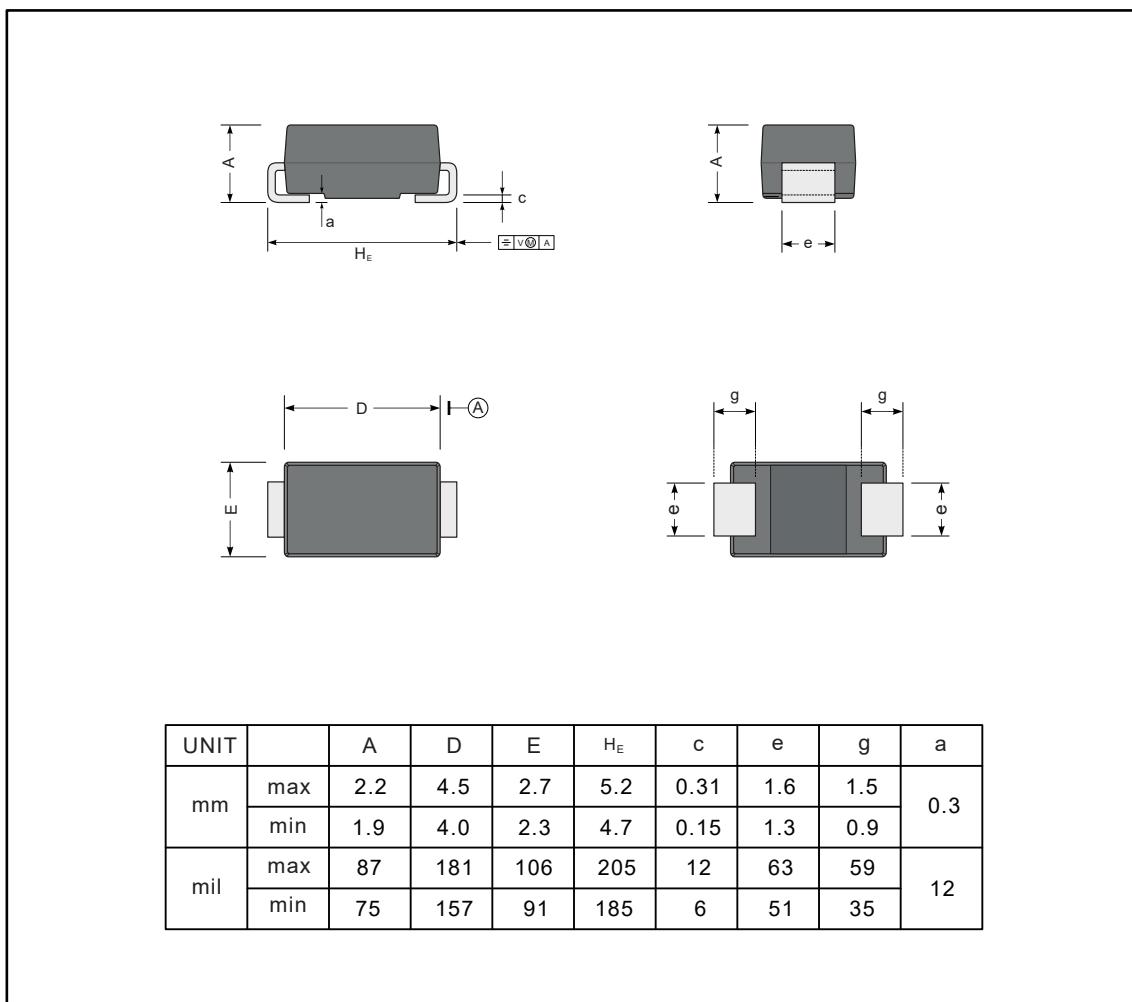
Fig.6- Typical Transient Thermal Impedance



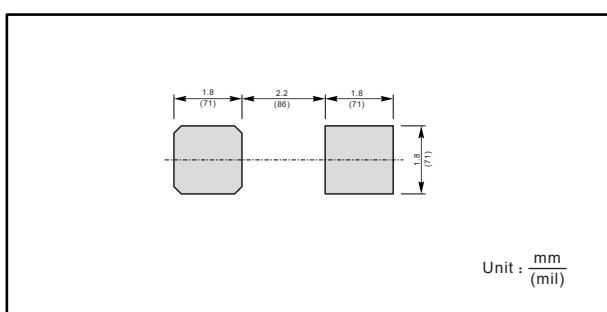
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMA



The recommended mounting pad size



Marking

Type number	Marking code
SS22	SS22
SS24	SS24
SS26	SS26
SS28	SS28
SS210	SS210
SS212	SS212
SS215	SS215
SS220	SS220