

SCHOTTKY BARRIER RECTIFIER

SS32F-- SS320F

Reverse Voltage - 20 to 200 V

Forward Current - 3.0A

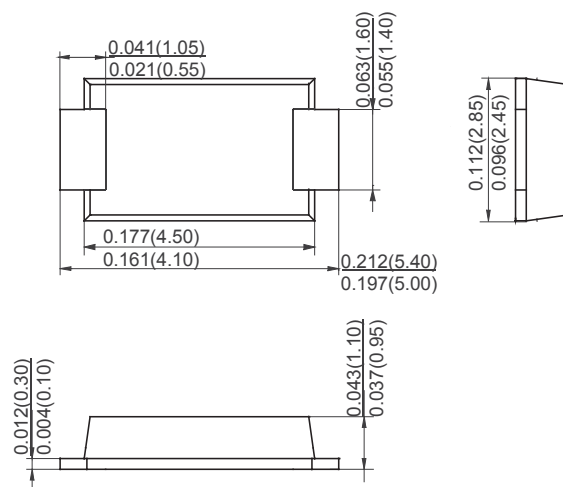
FEATURES

- 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: SMAF molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end

SMAF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND 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	SS32F	SS34F	SS34AF	SS36F	SS38F	SS310F	SS312F	SS315F	SS320F	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	40	45	60	80	100	120	150	200	V
Maximum RMS voltage	V _{RMS}	14	28	31.5	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	45	60	80	100	120	150	200	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					70				A
Max Instantaneous Forward Voltage at 3 A	V _F	0.55	0.70			0.85		0.95		V	
Maximum DC Reverse Current T _a = 25°C at Rated DC Reverse Voltage T _a = 100°C	I _R	0.5 10				0.3 5				mA	
Typical Junction Capacitance ⁽¹⁾	C _j	250				160				pF	
Typical Thermal Resistance ⁽²⁾	R _{θJA} R _{θJC}	40									°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.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

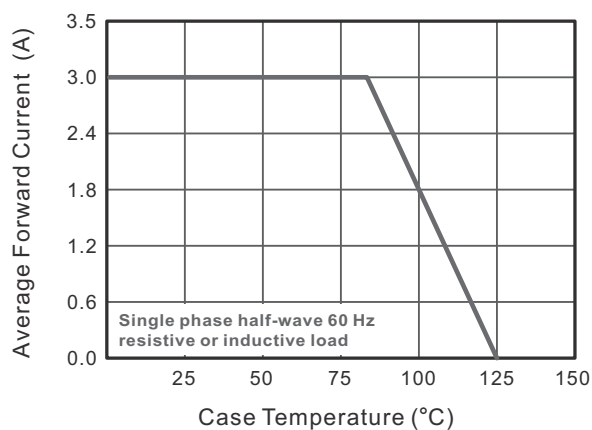


Fig.2 Typical Reverse Characteristics

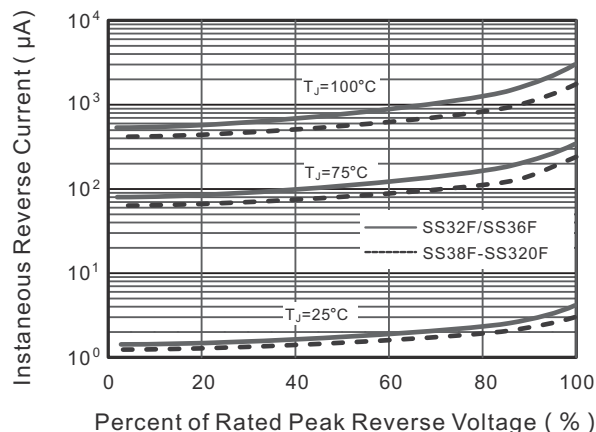


Fig.3 Typical Forward Characteristic

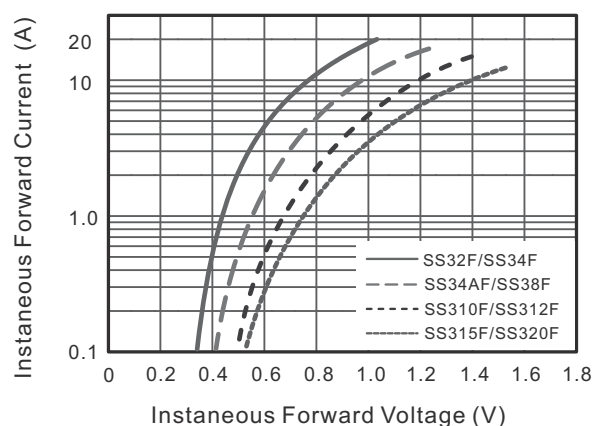


Fig.4 Typical Junction Capacitance

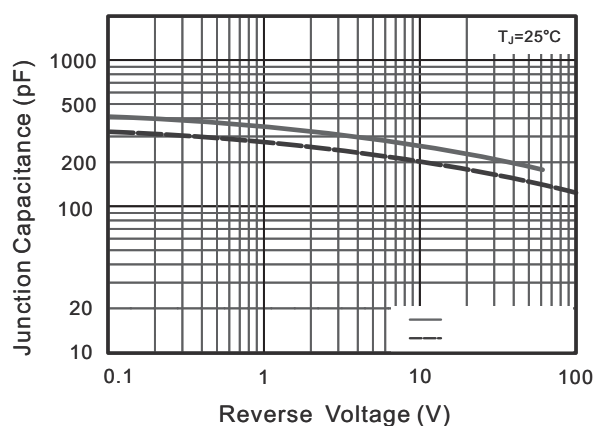


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

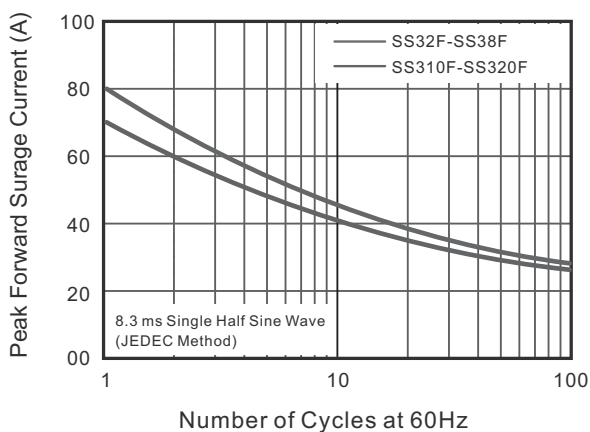


Fig.5- Typical Transient Thermal Impedance

