















**ESD** 

TVS

MOS

LDO

Diode

Sensor

DC-DC

# **Product Specification**

Domestic Part Number	SS32F THRU SS320F
<ul><li>Overseas Part Number</li></ul>	SS32F THRU SS320F
▶ Equivalent Part Number	SS32F THRU SS320F





Surface Mount Schottky Barrier Rectifier 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**

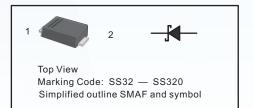
· Case: SMAF

• Terminals: Solderable per MIL-STD-750, Method 2026

• Approx. Weight: 27mg / 0.00095oz

#### **PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode



#### Absolute Maximum Ratings and Electrical characteristics

Ratings at 25  $^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20  $^{\circ}$ C

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 <sub>RMS</sub>	14	28	31.5	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	45	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	3.0						А			
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	80						А			
Max Instantaneous Forward Voltage at 3 A	V <sub>F</sub>	0.55 0.70			0.85		0.95		V		
Maximum DC Reverse Current $T_a = 25^{\circ}$ C at Rated DC Reverse Voltage $T_a = 100^{\circ}$ C	I <sub>R</sub>	0.5 5 0.3 3					mA				
Typical Junction Capacitance (1)	C <sub>j</sub>	250 180						pF			
Typical Thermal Resistance (2)	R <sub>θJA</sub>	70 18					°C/W				
Operating Junction Temperature Range	Tj	-55 ~ +125					°C				
Storage Temperature Range	$T_{stg}$	-55 ~ +150					°C				

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

<sup>(2)</sup> P.C.B. mounted with 2.0"  $\times$  2.0" (5  $\times$  5 cm) copper pad areas.



Fig.1 Forward Current Derating Curve

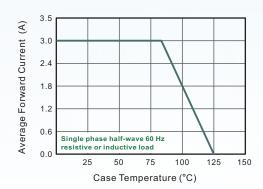


Fig.2 Typical Reverse Characteristics

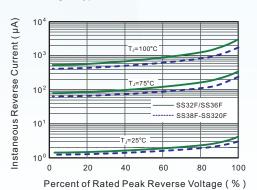


Fig.3 Typical Forward Characteristic

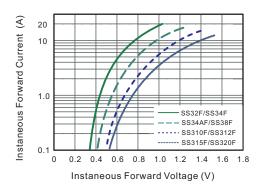


Fig.4 Typical Junction Capacitance

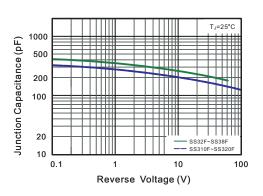


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

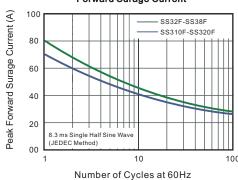
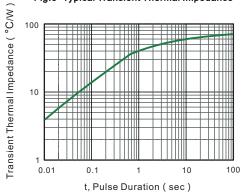


Fig.5- Typical Transient Thermal Impedance

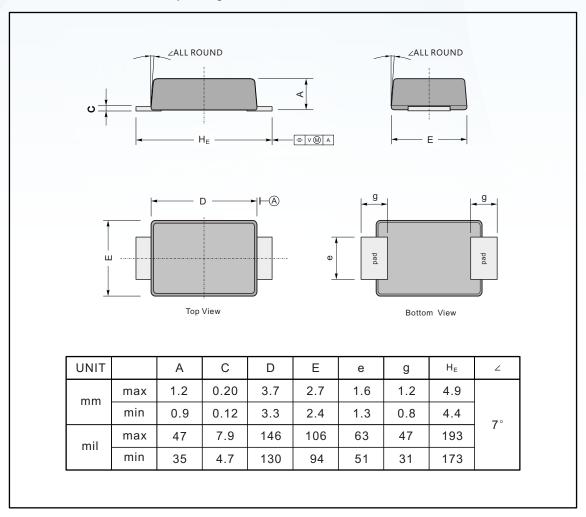




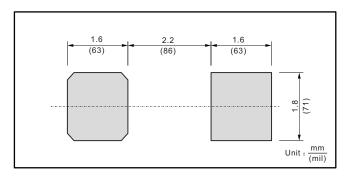
# PACKAGE OUTLINE

# Plastic surface mounted package; 2 leads

#### **SMAF**



# The recommended mounting pad size



### Marking

Type number	Marking code					
SS32F	SS32					
SS34F	SS34					
SS34AF	SS34A					
SS36F	SS36					
SS38F	SS38					
SS310F	SS310					
SS312F	SS312					
SS315F	SS315					
SS320F	SS320					



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