

# SS32F-AT THRU SS320F-AT

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Forward Current: 3.0A

Reverse Voltage: 20V to 200V

### FEATURES

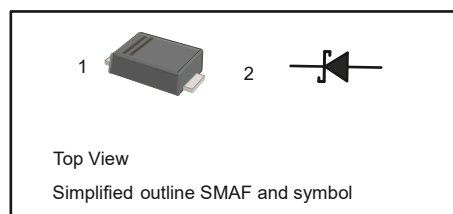
- ◆ For surface mount applications
- ◆ High forward surge current capability
- ◆ Low power loss, high efficiency
- ◆ Metal silicon junction, majority carriers conduction

### MECHANICAL DATA

- ◆ Case: SMAF molded plastic body
- ◆ Terminals: Solderable per MIL-STD-750 , Method 2026
- ◆ Weight: Approximated 0.027 grams

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derating by 20 %.

PARAMETER	SYMBOL	SS32F-AT	SS34F-AT	SS34AF-AT	SS36F-AT	SS38F-AT	SS310F-AT	SS312F-AT	SS315F-AT	SS320F-AT	UNIT
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 (Note1)	$I_{FSM}$	80									A
Maximum Forward Voltage at 3.0 A	$V_F$	0.55		0.70			0.85		0.95		V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A=25^\circ\text{C}$ at $T_A=100^\circ\text{C}$	$I_R$	0.5 5			0.3 3					mA	
Typical Junction Capacitance(Note2)	$C_J$	250			180					pF	
Typical Thermal Resistance (Note3)	$R_{\theta JA}$	70									$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +125									$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150									$^\circ\text{C}$

- Notes: 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method).  
 2. Measured at 1MHz and applied reverse voltage of 4 V D C.  
 3. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Dated: 05/2017  
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## RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

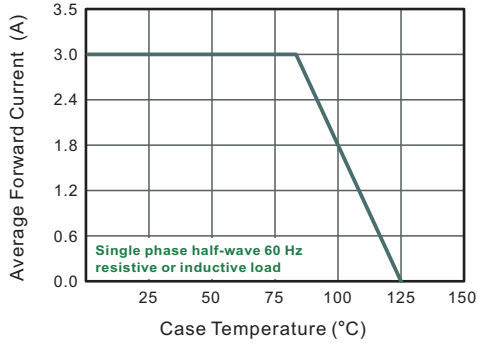


Fig.2 Typical Reverse Characteristics

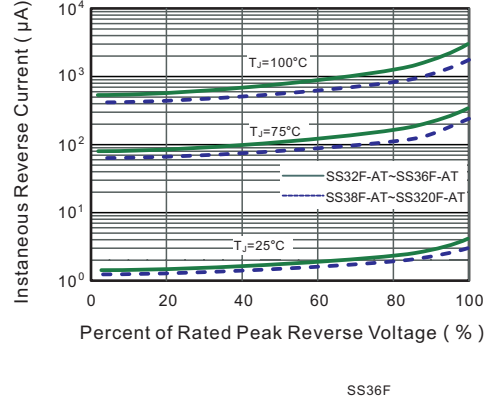


Fig.3 Typical Forward Characteristic

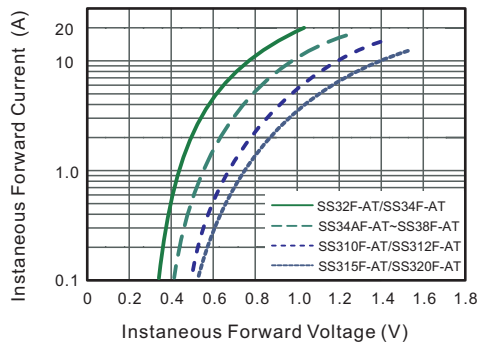


Fig.4 Typical Junction Capacitance

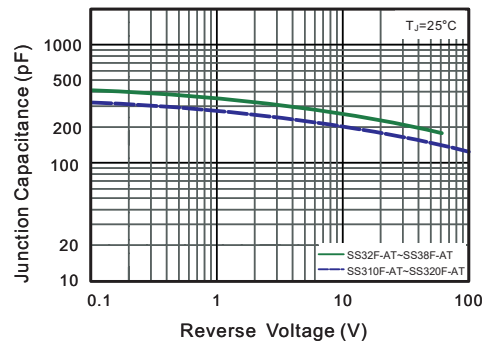


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

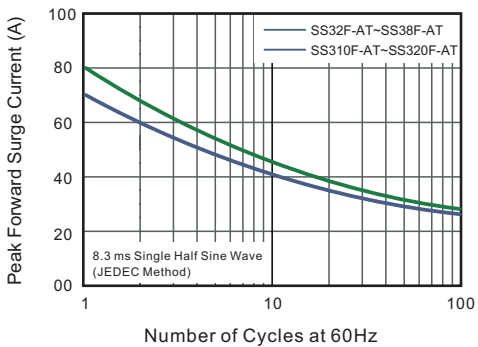
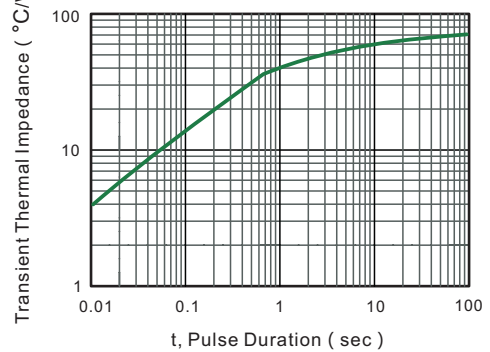


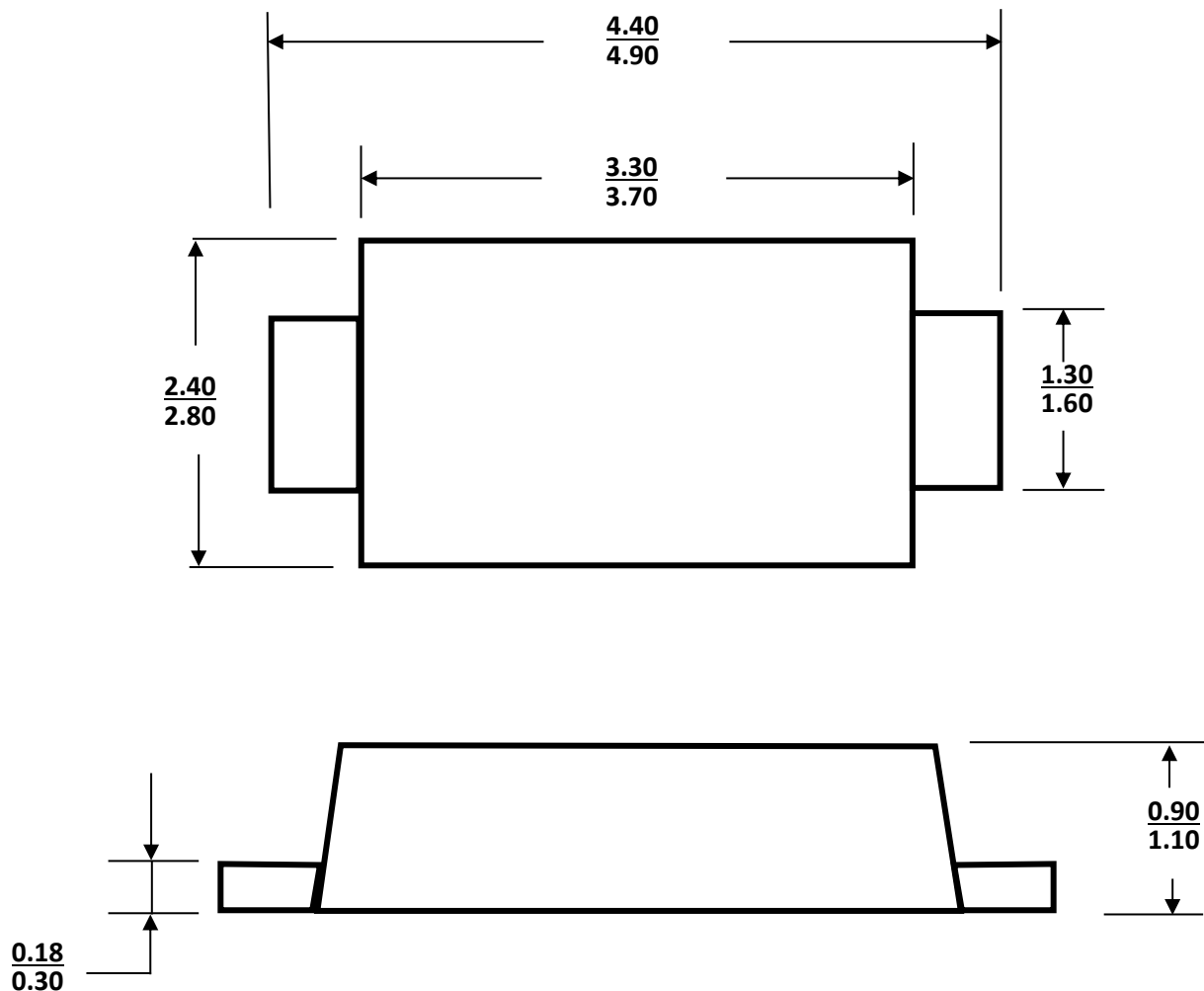
Fig.5- Typical Transient Thermal Impedance



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## PACKAGE OUTLINE

SMAF



Dimensions in millimeters

### ORDERING INFORMATION

Device	Package	Shipping
SS32F-AT thru SS320F-AT	SMAF	3,000/Tape & Reel (7 inches)
		10,000/ Tape & Reel (13 inches)

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