

SS52F-AT THRU SS520F-AT

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Forward Current-5.0A

Reverse Voltage-20V to 200V

FEATURES

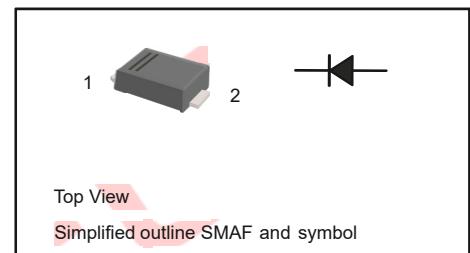
- ◆ For surface mount applications
- ◆ High forward surge current capability
- ◆ Low power loss, high efficiency
- ◆ Metal silicon junction, majority carriers conduction

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	SS52F -AT	SS54F -AT	SS56F -AT	SS58F -AT	SS510F -AT	SS512F -AT	SS515F -AT	SS520F -AT	UNIT
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)}									A
Peak Forward Surge Current (Note1)	I _{FSM}									A
Maximum Forward Voltage at 5.0 A	V _F	0.55		0.70				0.85		V
Maximum DC Reverse Current at Rated DC Blocking Voltage at T _A =25°C	I _R					1.0				mA
T _A =100°C						50				
Typical Junction Capacitance (Note2)	C _J	500			300					pF
Typical Thermal Resistance (Note3)	R _{θJA}				60					°C/W
Operating and Storage Temperature Range	T _J , T _{STG}				-55 to +150					°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" (5cm X 5 cm) copper pad areas.

Dated: 09/2016
Rev:1.0

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

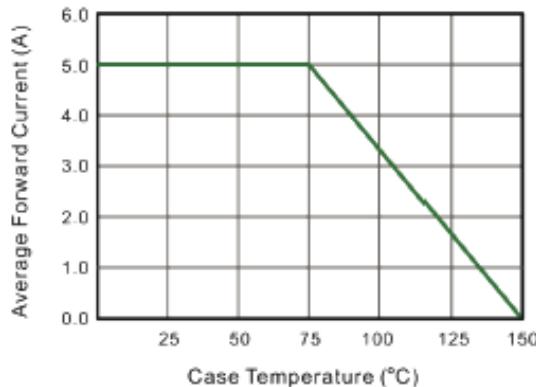


Fig.2 Typical Reverse Characteristics

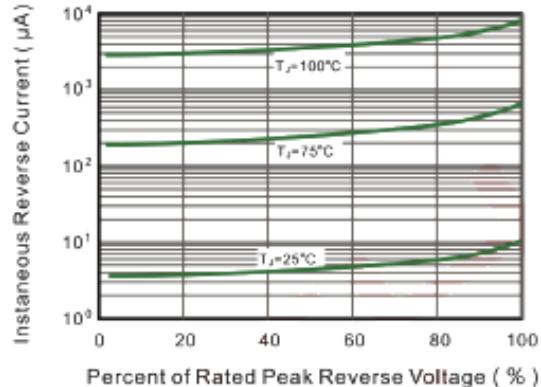


Fig.3 Typical Forward Characteristic

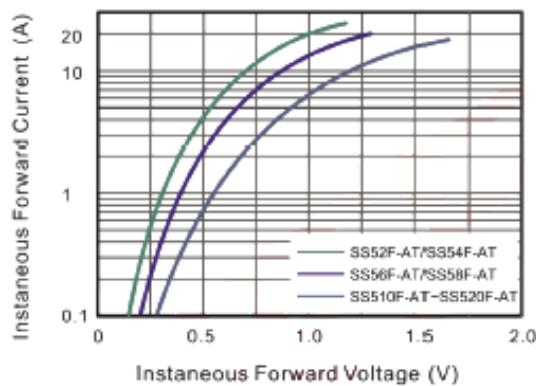


Fig.4 Typical Junction Capacitance

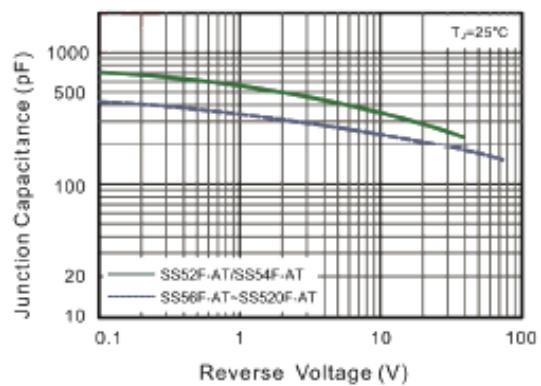


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

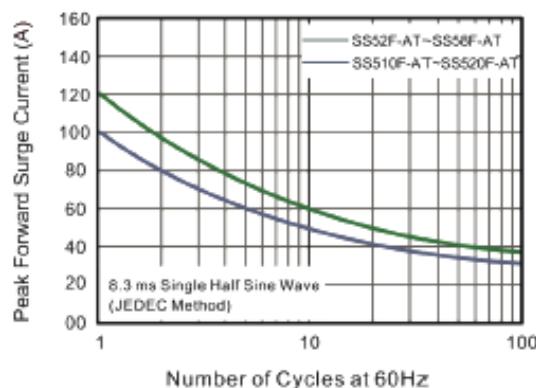
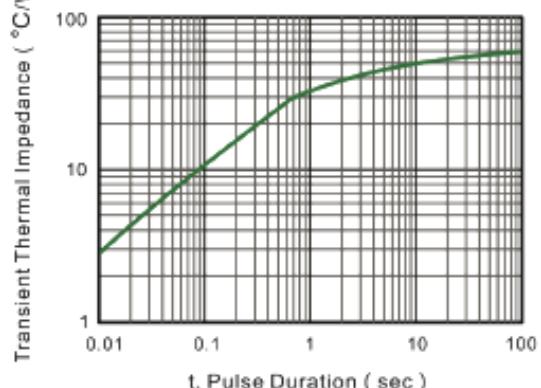


Fig.6- Typical Transient Thermal Impedance



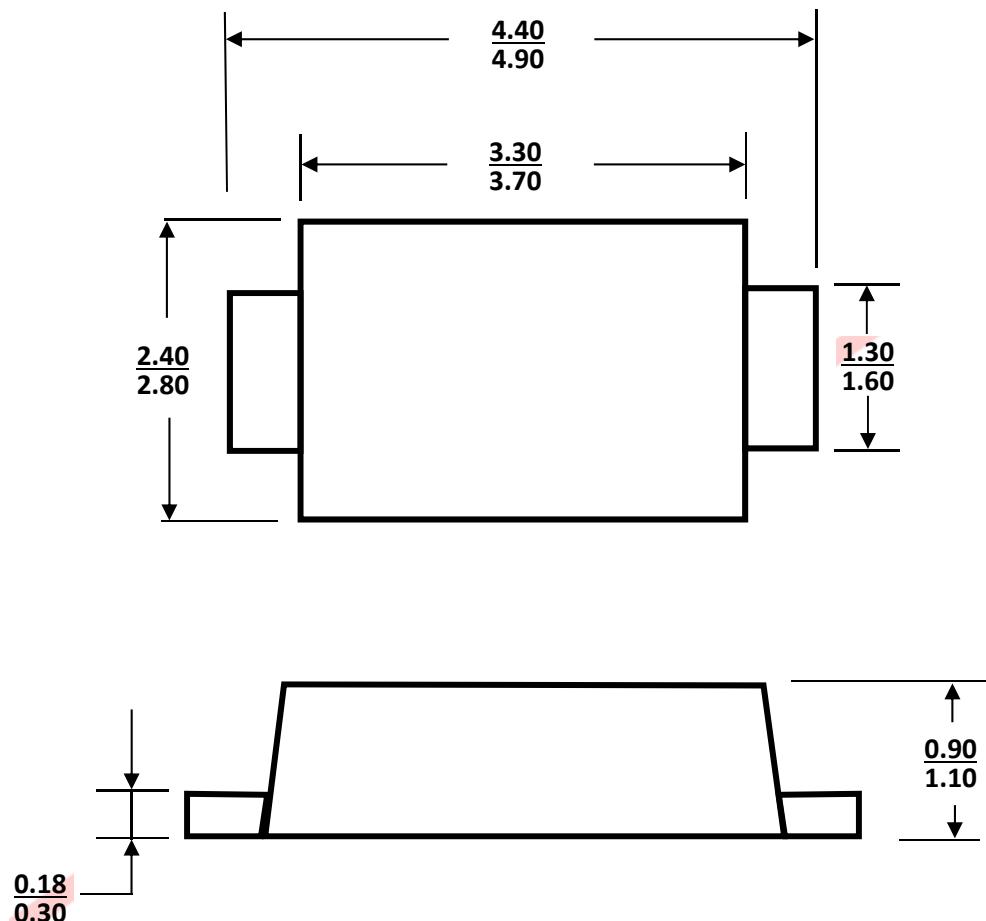
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PACKAGE OUTLINE

SMAF



Dimensions in millimeters

ORDERING INFORMATION

Device	Package	Shipping
SS52F-AT thru SS520F-AT	SMAF	3,000/Tape & Reel (7 inches)
		5,000/Tape & Reel (13 inches)

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