

SS12F-AT THRU SS120F-AT

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Forward Current-1A

Reverse Voltage-20V to 200V

FEATURES

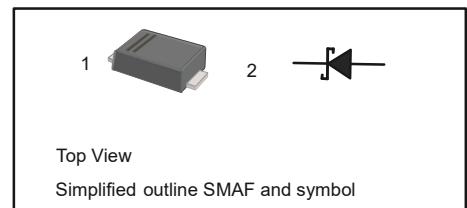
- ◆ For surface mount applications
- ◆ High forward surge current capability
- ◆ Low power loss, high efficiency
- ◆ Metal silicon junction, majority carriers conduction

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	SS12F -AT	SS14F -AT	SS16F -AT	SS18F -AT	SS110F -AT	SS112F -AT	SS115F -AT	SS120F -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 at T _C =125°C	I _{F(AV)}						1.0			A
Peak Forward Surge Current (Note1)	I _{FSM}						30			A
Maximum Forward Voltage at 1.0 A	V _F		0.55		0.70		0.85		0.90	V
Maximum DC Reverse Current at Rated DC Blocking Voltage at T _A =25°C T _A =100°C	I _R			0.3	10		0.2	5	0.1	mA
Typical Junction Capacitance (Note2)	C _J		110				80			pF
Typical Thermal Resistance (Note3)	R _{θJA}					95				°C/W
Storage Temperature Range	T _{STG}					-55 to +150				°C
Operating Junction Temperature Range	T _J					-55 to +125				°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: 04/2017
Rev:2.0

SS12F-AT THRU SS120F-AT

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

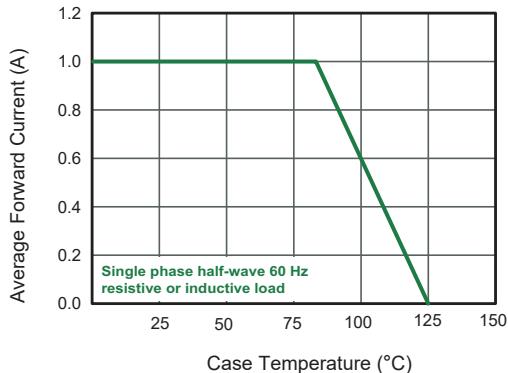


Fig.2 Typical Reverse Characteristics

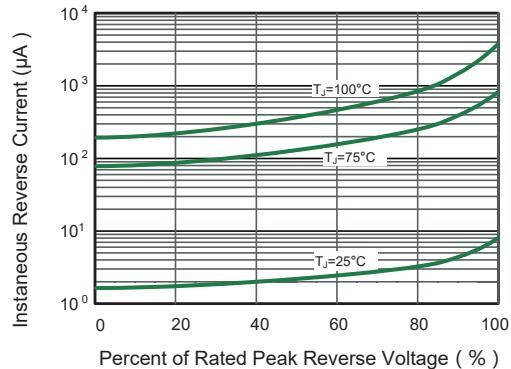


Fig.3 Typical Forward Characteristic

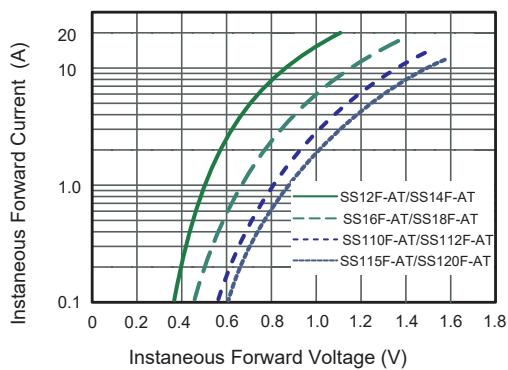


Fig.4 Typical Junction Capacitance

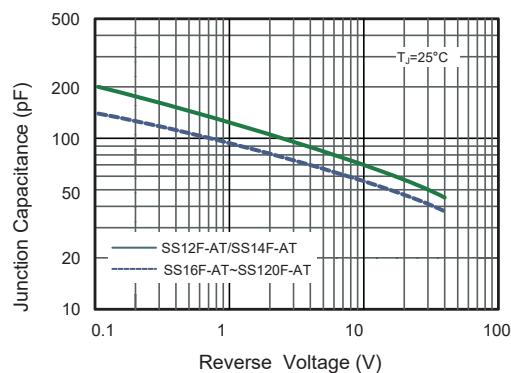


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

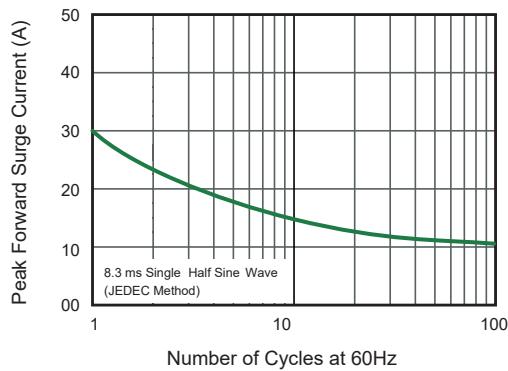
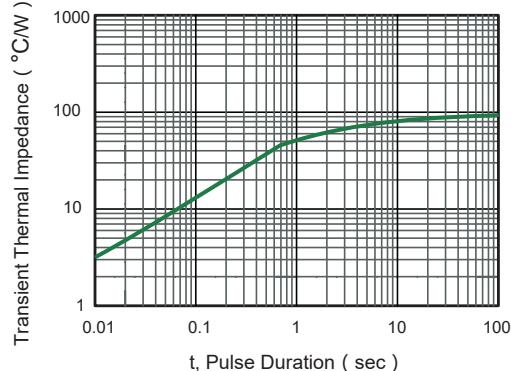


Fig.6- Typical Transient Thermal Impedance

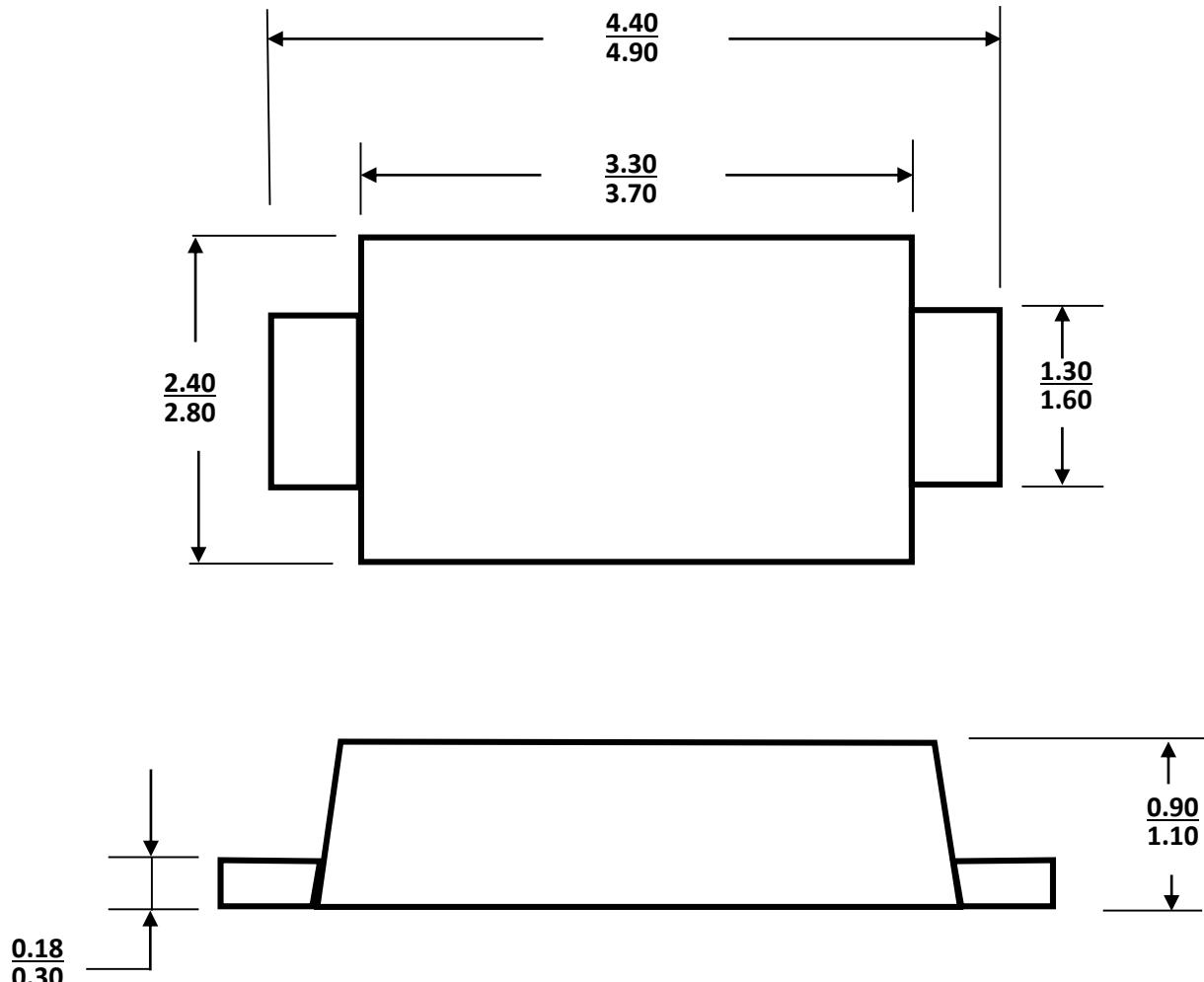


Dated: 04/2017
Rev:2.0

SS12F-AT THRU SS120F-AT

PACKAGE OUTLINE

SMAF



Dimensions in milimeters

ORDERING INFORMATION

Device	Package	Shipping
SS12F-AT thru SS120F-AT	SMAF	3,000/Tape & Reel (7 inches)
		10,000/ Tape & Reel (13 inches)

Dated: 04/2017
Rev:2.0