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

Top View
Marking Code: SS12 — SS120
Simplified outline SMAF and symbol

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ 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 -PJ	SS14F -PJ	SS16F -PJ	SS18F -PJ	SS110F -PJ	SS112F -PJ	SS115F -PJ	SS120F -PJ	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℃	$I_{F(AV)}$	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℃ T_A=100℃	I_R	0.3 10				0.2 5		0.1 2		mA
Typical Junction Capacitance (Note2)	C_J	110		80						pF
Typical Thermal Resistance(Note3)	$R_{\theta JA}$	95								℃/W
Storage Temperature Range	T_{STG}	-55 to +150								℃
Operating Junction Temperature Range	T_J	-55 to +125								℃

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.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

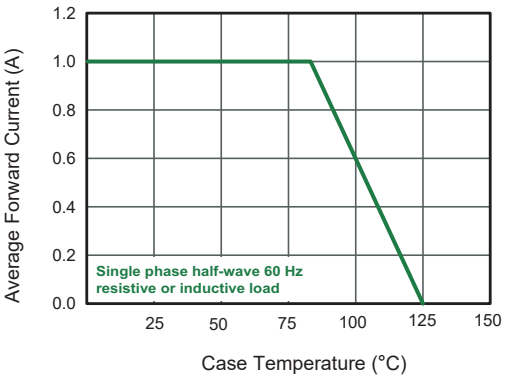


Fig.2 Typical Reverse Characteristics

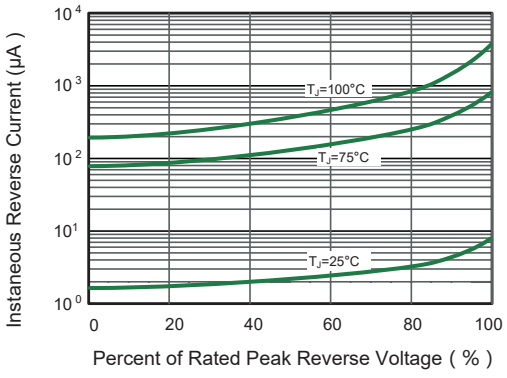


Fig.3 Typical Forward Characteristic

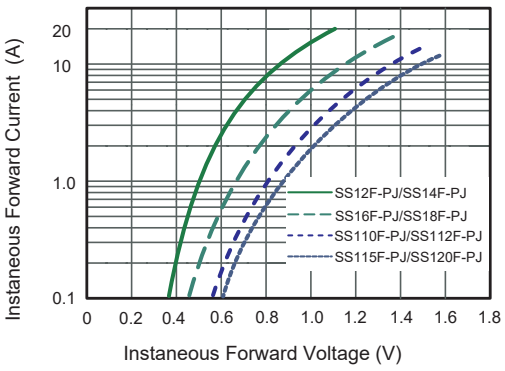


Fig.4 Typical Junction Capacitance

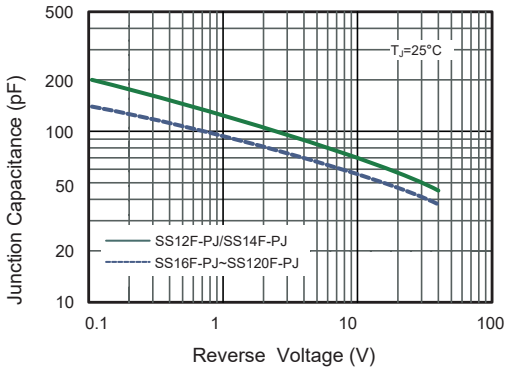


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

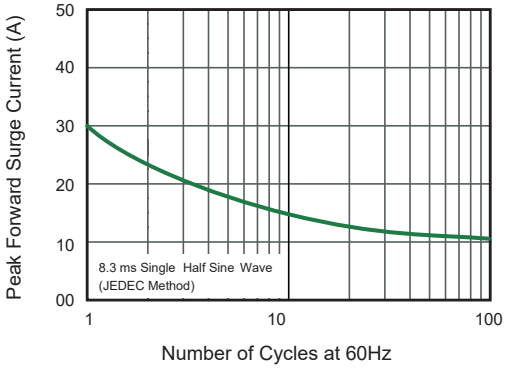
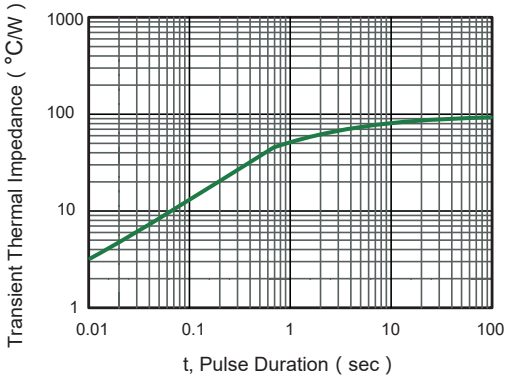
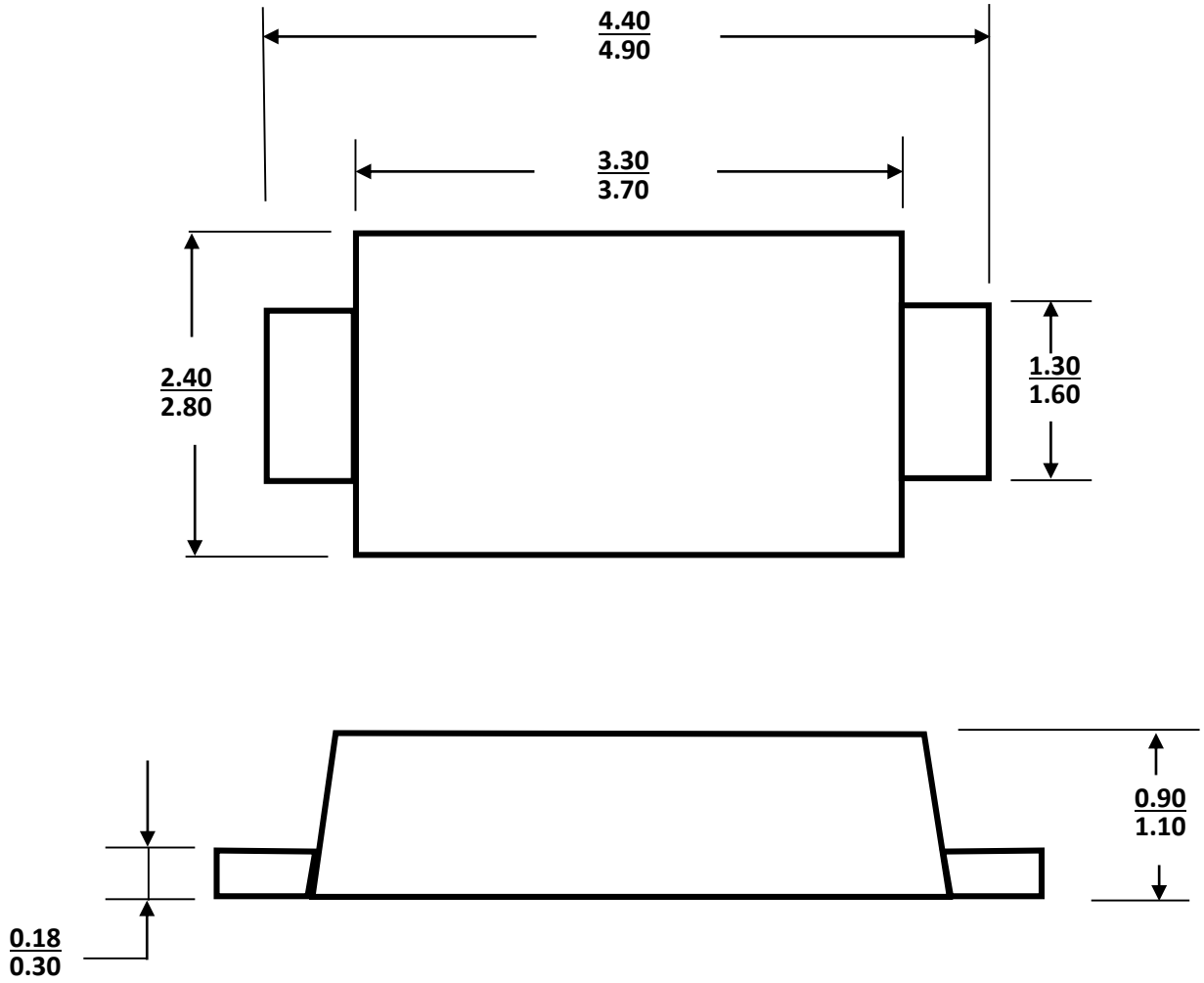


Fig.6- Typical Transient Thermal Impedance



PACKAGE OUTLINE

SMAF



Dimensions in milimeters

ORDERING INFORMATION

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