

SS12F SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE	20-60 Volts	CURRENT	1 Amperes
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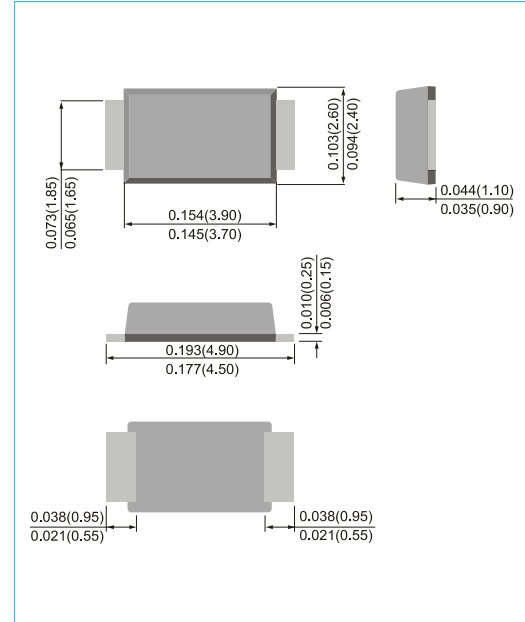
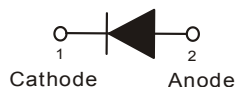
SMAF	Unit : inch(mm)
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FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Low power loss, high efficiency
- Metal to silicon rectifier. majority carrier conduction
- High surge capacity
- High current capacity , low V_F
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SMAF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Approx. Weight:0.0011 ounces, 0.0328 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	SS12F	SS13F	SS14F	SS15F	SS16F	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	V
RMS Voltage	V _{RMS}	14	21	28	35	42	V
DC Blocking Voltage	V _R	20	30	40	50	60	V
Average Forward Current	I _{F(AV)}	1					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	30					A
Forward Voltage at 1.0A	V _F	0.5			0.7		V
DC Reverse Current at Rated DC Blocking Voltage T _J =25°C	I _R	0.2			0.1		mA
Typical Junction capacitance V _R =4V,f=1MHz	C _J	45					pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	R _{θJL} R _{θJA}	18 150					°C / W
Operating Junction Temperature and Storage Temperature Range	T _J ,T _{STG}	-55 to +150					°C

NOTES : 1. Mounted on an FR4 PCB, single-sided copper, with 48cm² copper pad area
2. Mounted on an FR4 PCB, single-sided copper, mini pad.

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RATING AND CHARACTERISTIC CURVES

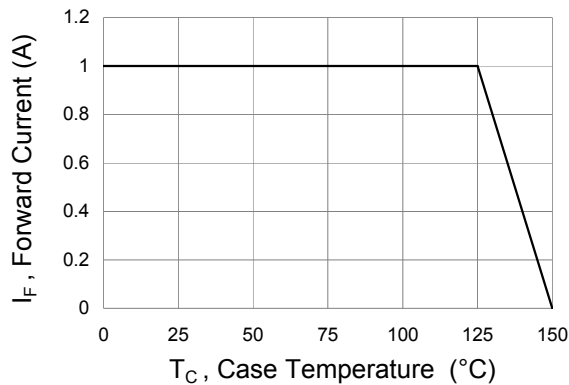


Fig.1 Forward Current Derating Curve

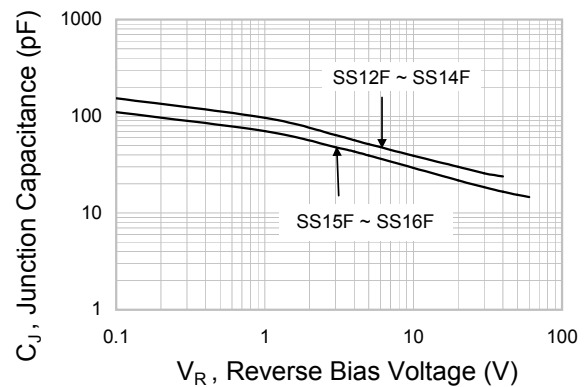


Fig.2 Typical Junction Capacitance

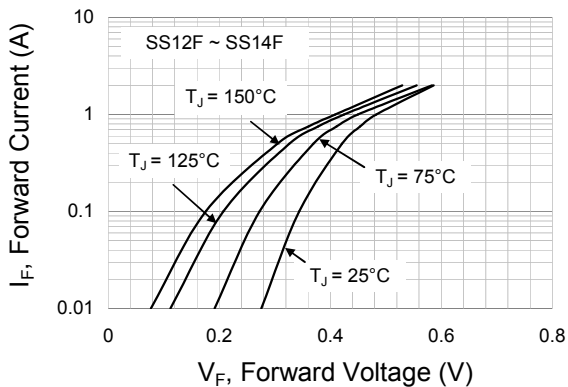


Fig.3 Typical Forward Characteristics

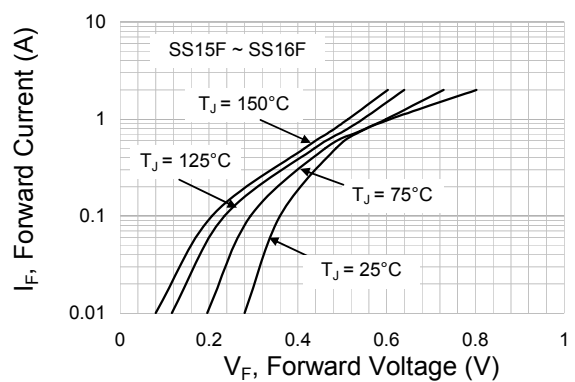


Fig.4 Typical Forward Characteristics

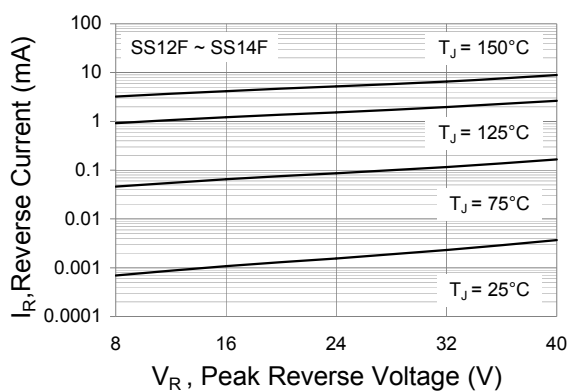


Fig.5 Typical Reverse Characteristics

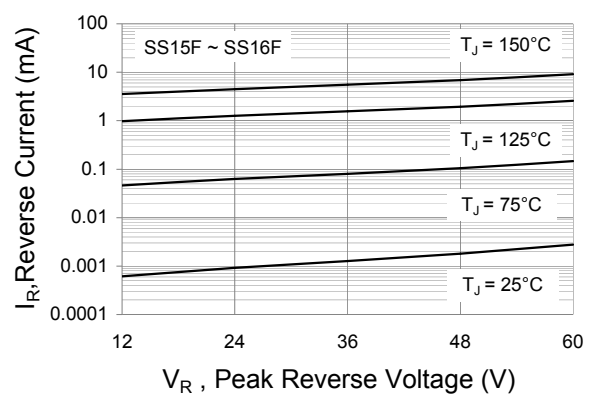
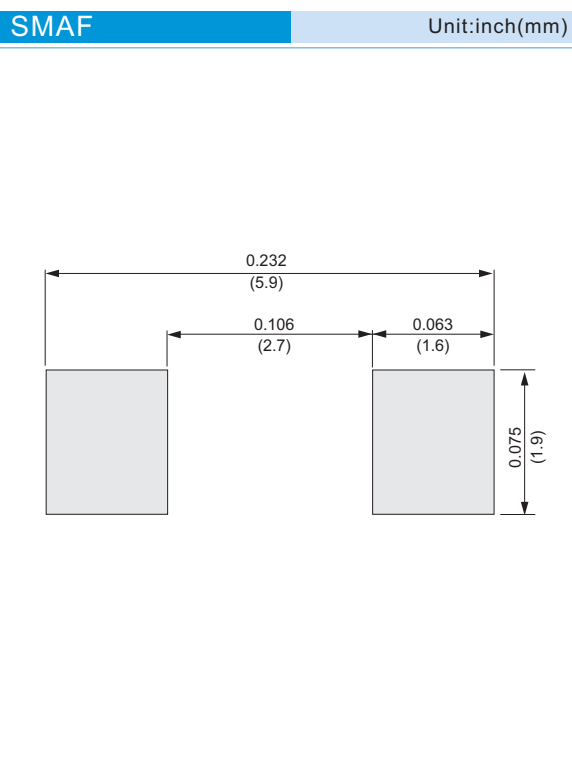


Fig.6 Typical Reverse Characteristics

SS12F SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

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