

# MSKSEMI

SEMICONDUCTOR



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Product data sheet

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**PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode

**FEATURES**

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

**MECHANICAL DATA**

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00086oz

**Absolute Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	SS22F	SS24F	SS26F	SS28F	SS210F	SS212F	SS215F	SS220F	Units
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	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50				40				A
Max Instantaneous Forward Voltage at 2 A	$V_F$	0.55	0.70		0.85		0.95		V	
Maximum DC Reverse Current $T_a = 25^\circ C$ at Rated DC Reverse Voltage $T_a = 100^\circ C$	$I_R$	0.5 10			0.3 5				mA	
Typical Junction Capacitance <sup>1)</sup>	$C_j$	220		80					pF	
Operating Junction Temperature Range	$T_j$	-55 ~ +125								° C
Storage Temperature Range	$T_{stg}$	-55 ~ +150								° C

1) Measured at 1MHz and applied reverse voltage of 4 V D.C.

**RATINGS AND CHARACTERISTIC CURVES SS22F THRU SS2200F**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

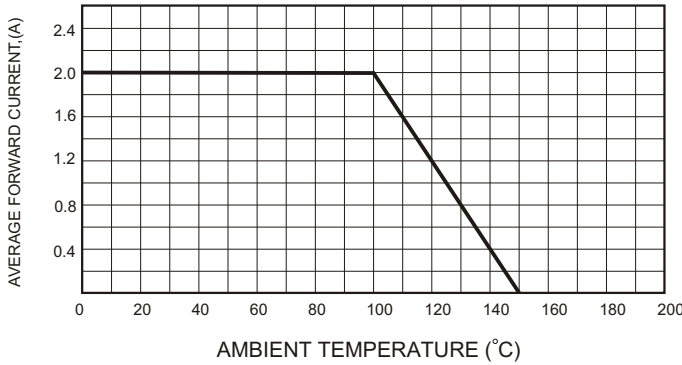


FIG.2-TYPICAL FORWARD CHARACTERISTICS

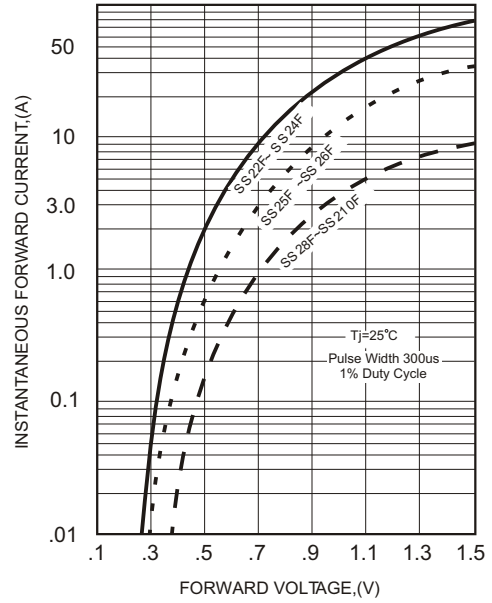


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

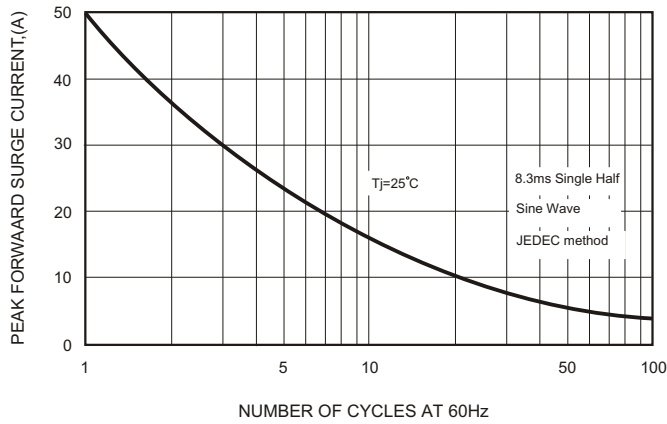


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

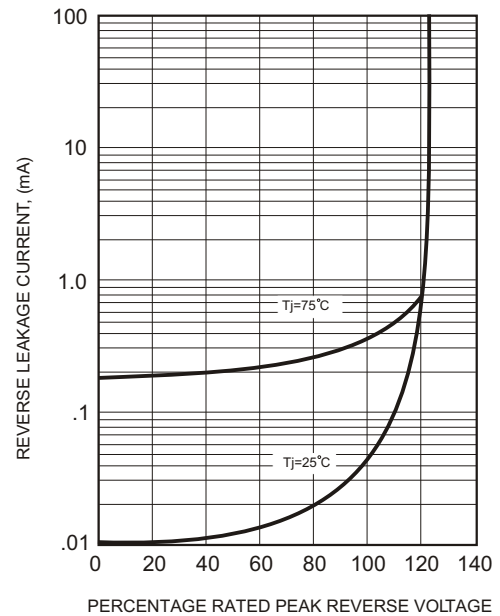
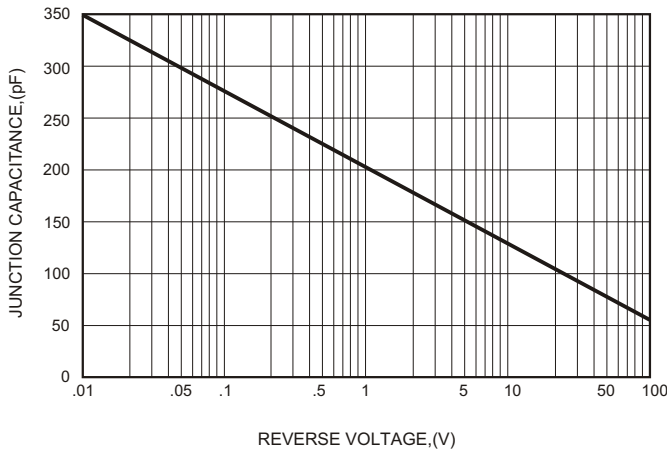
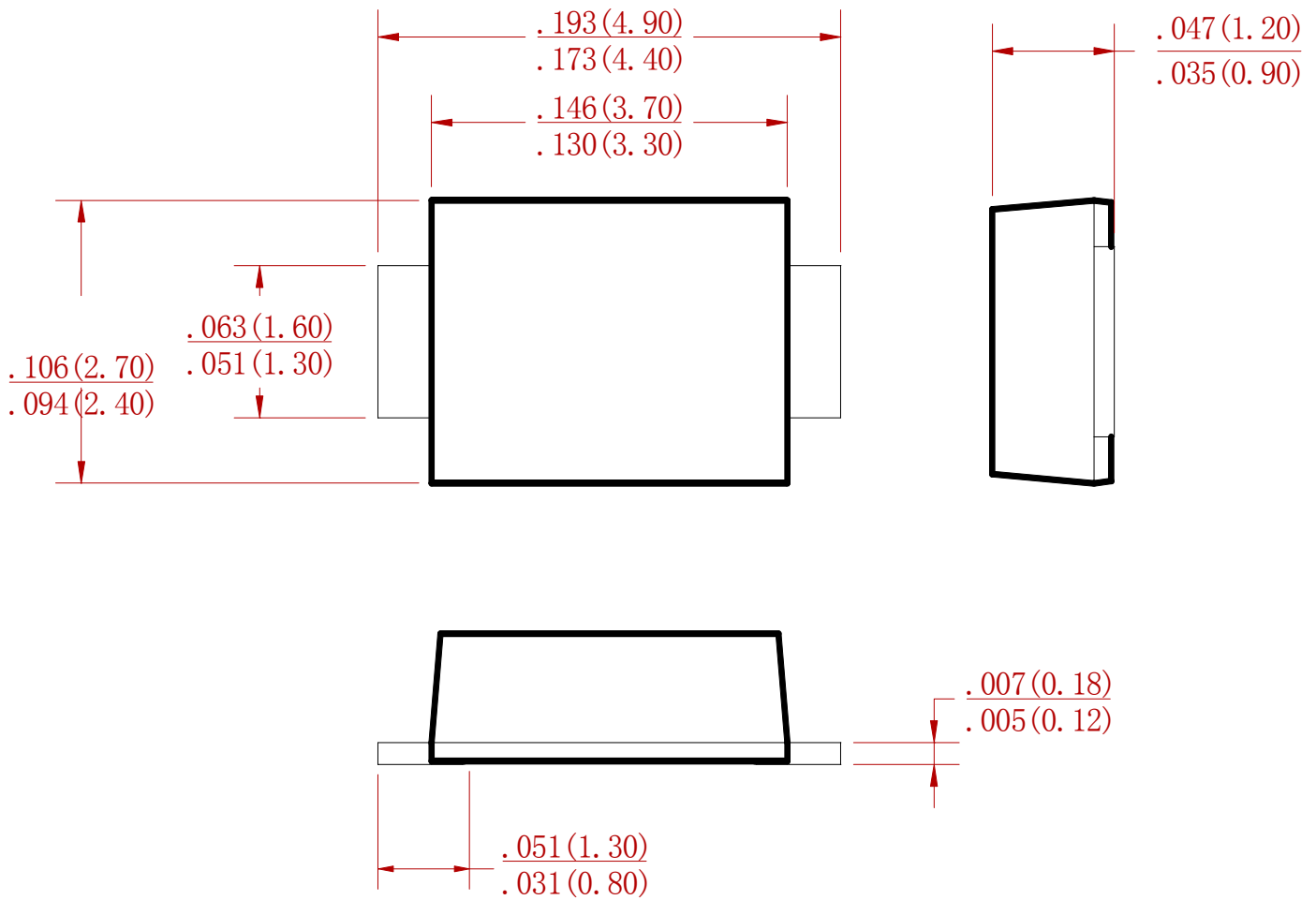


FIG.4-TYPICAL JUNCTION CAPACITANCE



**PACKAGE MECHANICAL DATA**



Dimensions in inches and (millimeters)

**REEL SPECIFICATION**

P/N	PKG	QTY
SS22F THRU SS2200F	SMAF	3000

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