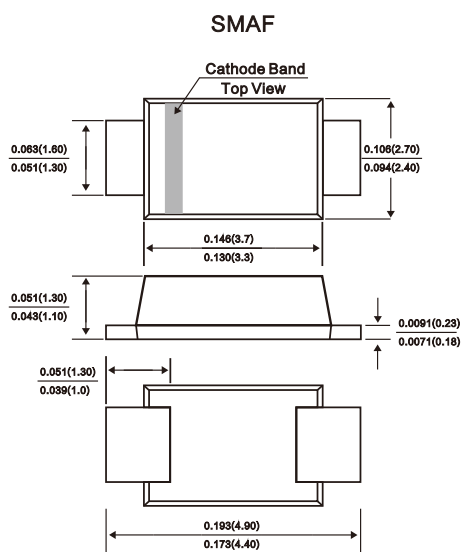


### Features

- 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 / 0.00095oz



Dimensions in inches and (millimeters)

### 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	SS32F	SS34 F	SS36F	SS38F	SS310F	SS312F	SS315F	SS320F	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	$I_{F(AV)}$	3.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80				70				A
Max Instantaneous Forward Voltage at 3 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 5			0.3 3				mA	
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	250			180				pF	
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	70								$^{\circ}C/W$
Operating Junction Temperature Range	$T_j$	-55 ~ +150								$^{\circ}C$
Storage Temperature Range	$T_{stg}$	-55 ~ +150								$^{\circ}C$

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

( 2 ) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Fig.1 Forward Current Derating Curve

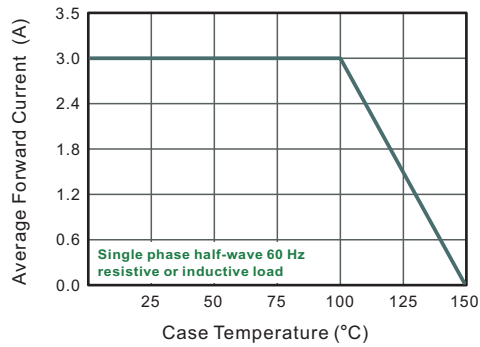


Fig.2 Typical Reverse Characteristics

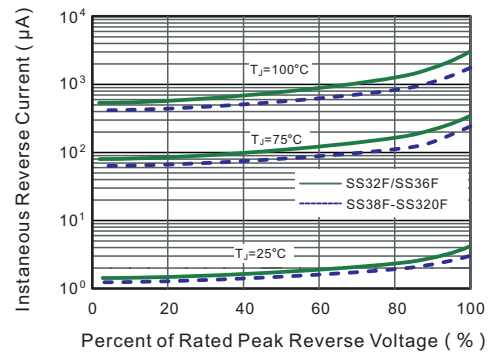


Fig.3 Typical Forward Characteristic

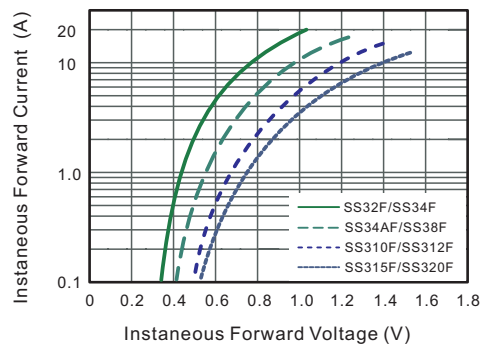


Fig.4 Typical Junction Capacitance

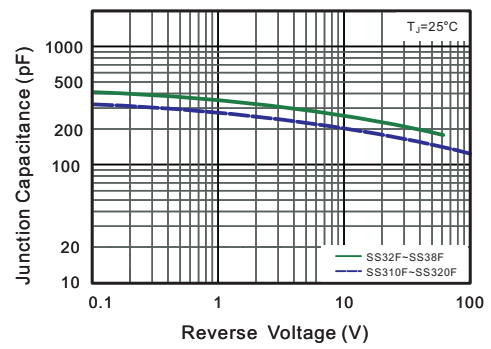


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

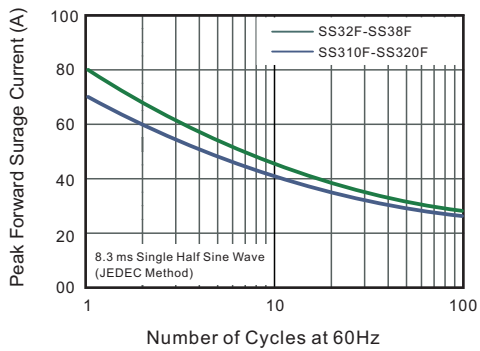
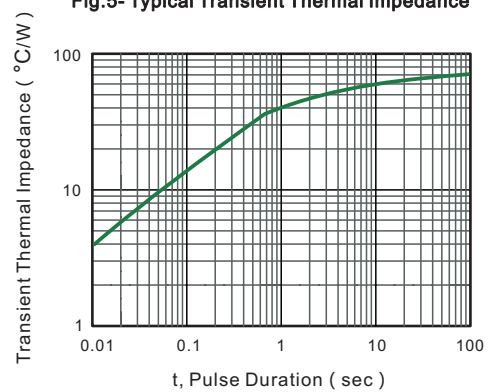


Fig.5- Typical Transient Thermal Impedance



**ORDERING INFORMATION**

Order Code	Package	Baseqty	Deliverymode
UMW SS32F	SMAF	3000	Tape and reel
UMW SS34F	SMAF	3000	Tape and reel
UMW SS36F	SMAF	3000	Tape and reel
UMW SS38F	SMAF	3000	Tape and reel
UMW SS310F	SMAF	3000	Tape and reel
UMW SS312F	SMAF	3000	Tape and reel
UMW SS315F	SMAF	3000	Tape and reel
UMW SS320F	SMAF	3000	Tape and reel