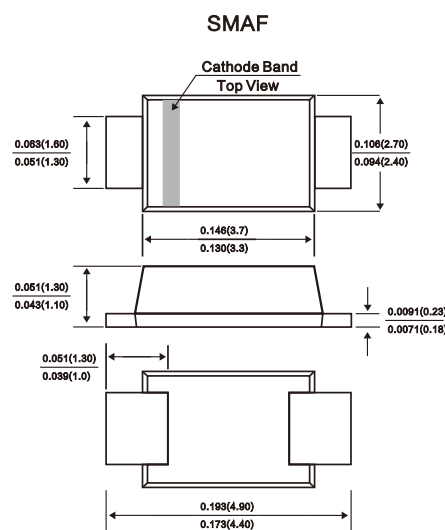


Features

- 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	SS22F	SS24F	SS26F	SS28F	SS210F	SS212F	SS215F	SS220F	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	120	150	200	
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								V
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		A
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 ⁽¹⁾	C_j	160			80					A
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	80								° pF
Operating Junction Temperature Range	T_j	-55 ~ +150								C/W
Storage Temperature Range	T_{stg}	-55 ~ +150								°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.

°C

Fig.1 Forward Current Derating Curve

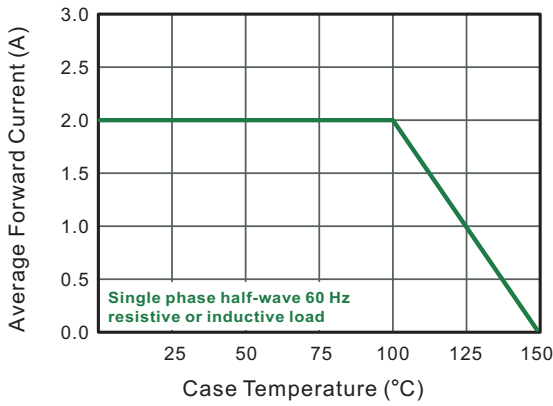


Fig.2 Typical Reverse Characteristics

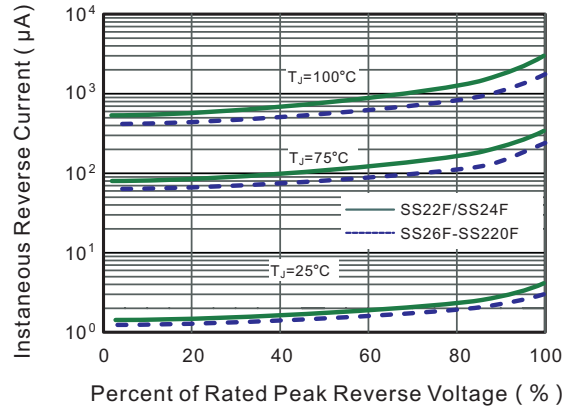


Fig.3 Typical Forward Characteristic

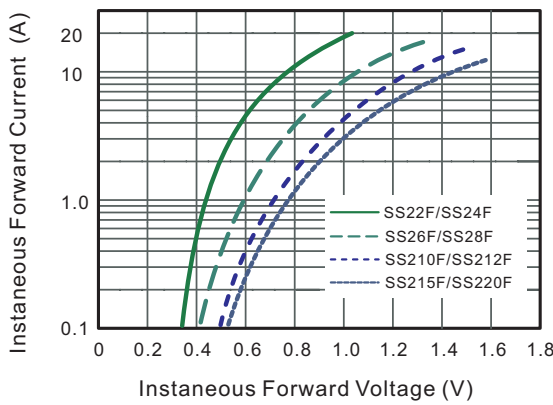


Fig.4 Typical Junction Capacitance

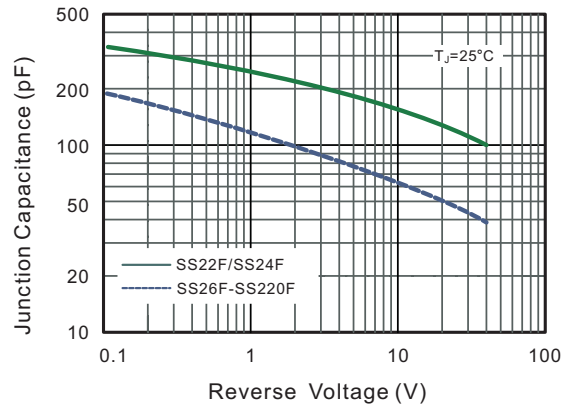


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

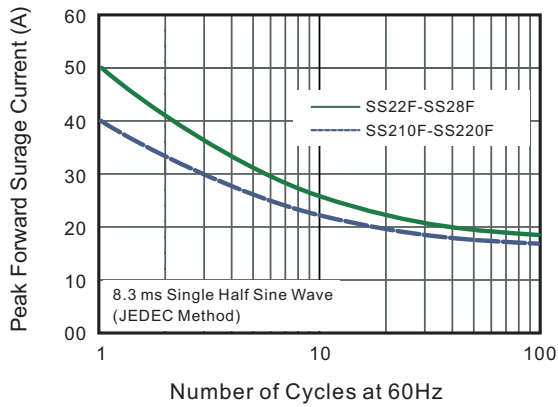
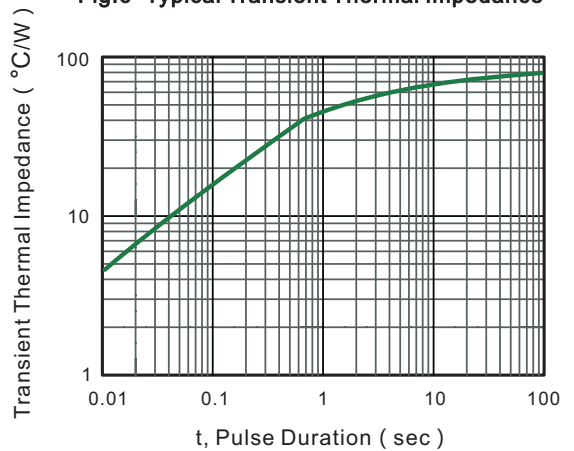


Fig.6- Typical Transient Thermal Impedance



ORDERING INFORMATION

Order Code	Package	Baseqty	Deliverymode
UMW SS22F	SMAF	3000	Tape and reel
UMW SS24F	SMAF	3000	Tape and reel
UMW SS26F	SMAF	3000	Tape and reel
UMW SS28F	SMAF	3000	Tape and reel
UMW SS210F	SMAF	3000	Tape and reel
UMW SS212F	SMAF	3000	Tape and reel
UMW SS215F	SMAF	3000	Tape and reel
UMW SS220F	SMAF	3000	Tape and reel