

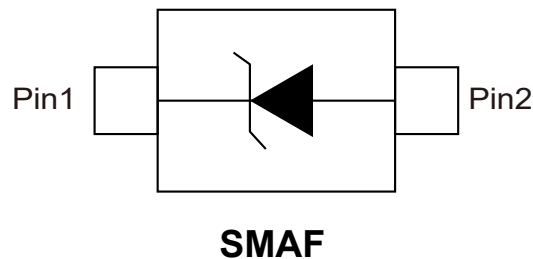
## 1.Features

- 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

## 2.Mechanical Data

- Case: SMAF
- Approx. Weight: 27mg 0.00095oz
- Terminals: Solderable per MIL-STD-750 Method 2026

## 3.Pinning information





## 4. Maximum Ratings And Electrical Characteristics

Parameter		Symbol	SS 32F	SS 34F	SS 36F	SS 38F	SS 310F	SS 312F	SS 315F	SS 320F	Units
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage		V <sub>RMS</sub>	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current		I <sub>F(AV)</sub>	3								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I <sub>FSM</sub>	80				70				A
Max Instantaneous Forward Voltage at 3A		V <sub>F</sub>	0.55		0.7		0.85		0.95		V
Maximum DC Reverse Current at Rated DC Reverse Voltage	T <sub>A</sub> =25°C	I <sub>R</sub>	0.5			0.3				mA	
	T <sub>A</sub> =100°C		5			3				mA	
Typical Junction Capacitance (Note1)		C <sub>J</sub>	250		180						pF
Typical Thermal Resistance (Note 2)		R <sub>θJA</sub>	70								°C/W
Junction Temperature Range		T <sub>J</sub>	-55 to 150								°C
Storage Temperature Range		T <sub>STG</sub>	-55 to 150								°C

Absolute Maximum Ratings and Electrical characteristics Ratings at ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %.

Notes:

- (1) Measured at 1MHz 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.



## 5. Typical characteristic

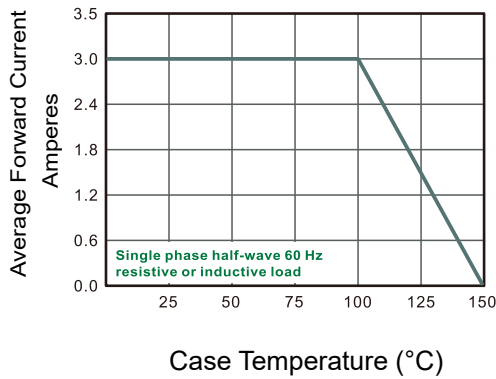


Figure 1: Forward Current Derating Curve

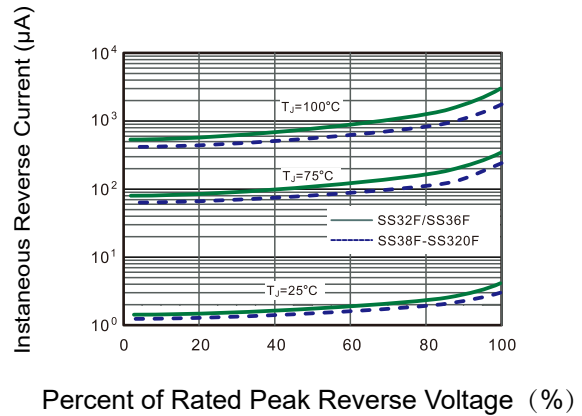


Figure 2: Typical Reverse Characteristics

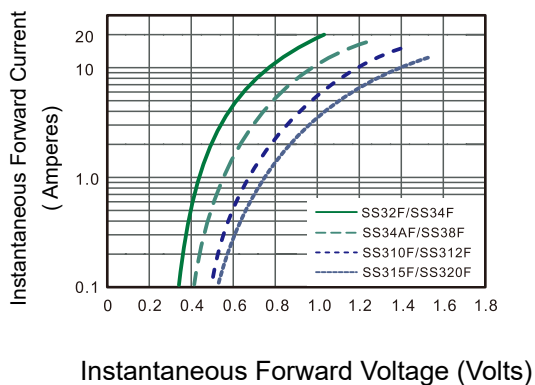


Figure 3: Typical Forward Characteristic

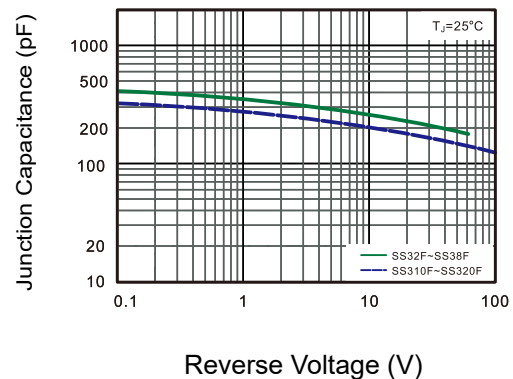


Figure 4: Typical Junction Capacitance

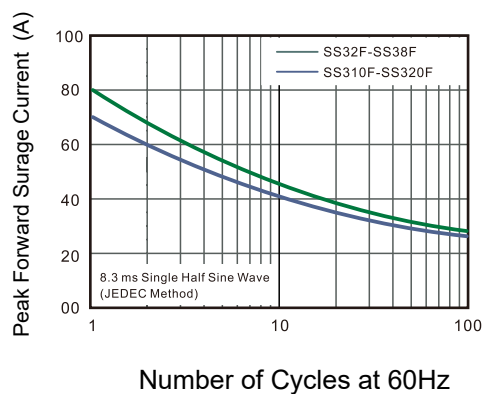


Figure 5: Maximum Non-Repetitive Peak Forward Surge Current

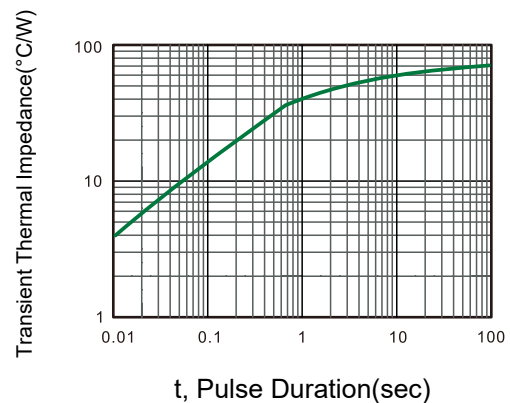
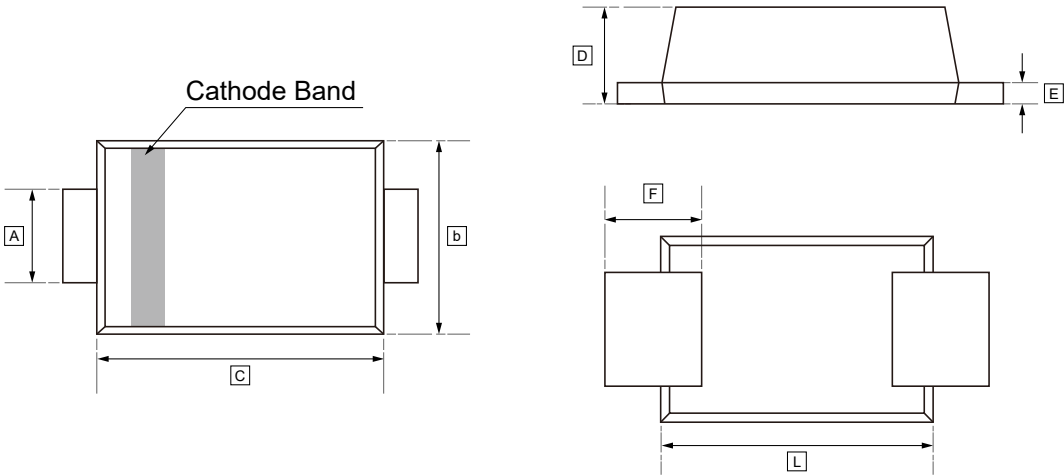


Figure 6: Typical Transient Thermal Impedance



6.SMAF Package Outline Dimensions

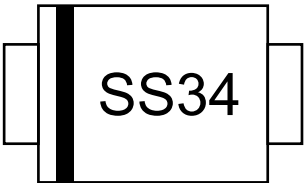


DIMENSIONS (mm are the original dimensions)

Symbol	A	b	C	D	E	F	L
Min	1.30	2.40	3.3	1.10	0.18	1.0	4.40
Max	1.60	2.70	3.7	1.30	0.23	1.30	4.90



7 .Ordering information



Order Code	Marking	Package	Base QTY	Delivery Mode
UMW SS32F	SS32	SMAF	3000	Tape and reel
UMW SS34F	SS34	SMAF	3000	Tape and reel
UMW SS36F	SS36	SMAF	3000	Tape and reel
UMW SS38F	SS38	SMAF	3000	Tape and reel
UMW SS310F	SS310	SMAF	3000	Tape and reel
UMW SS312F	SS312	SMAF	3000	Tape and reel
UMW SS315F	SS315	SMAF	3000	Tape and reel
UMW SS320F	SS320	SMAF	3000	Tape and reel



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