

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

Forward Current - 3 A

FEATURES

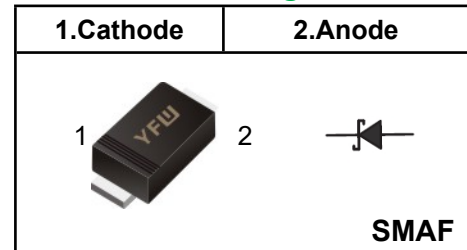
- ◆Metal silicon junction, majority carrier conduction
- ◆For surface mounted applications
- ◆Low power loss, high efficiency
- ◆High forward surge current capability
- ◆For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

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

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 %

Pinning



Marking Code

SS32F	YFW SS32
SS34F	YFW SS34
SS36F	YFW SS36
SS38F	YFW SS38
SS310F	YFW SS310
SS312F	YFW SS312
SS315F	YFW SS315
SS320F	YFW SS320

Parameter	Symbols	SS32F	SS34F	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								A
Peak Forward Surge Current,1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	160								A
I ² t Rating for fusing(3ms≤t≤8.3ms)	I²t	26.5								A
Maximum Instantaneous Forward Voltage at 3 A	V_F	0.55		0.70	0.85		0.95			V
Maximum Instantaneous Reverse Current T _A = 25°C at Rated DC Reverse Voltage T _A = 100°C	I_R	0.5 5			0.3 3					mA
Typical Junction Capacitance ⁽¹⁾	C_j	135		107	83		68		50	pF
Typical Thermal Resistance ⁽²⁾	R_{θJA} R_{θJC} R_{θJL}	100 20 25								°C/W
Operating Junction Temperature Range	T_J	-55 ~ +150								°C
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.

Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

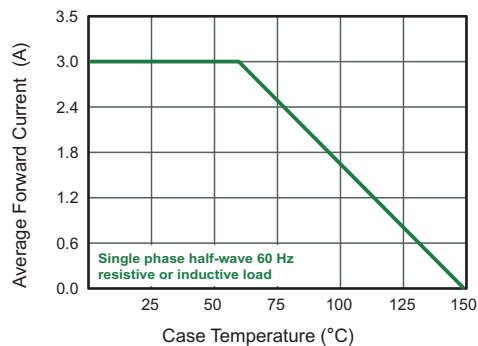


Fig.2 Typical Reverse Characteristics

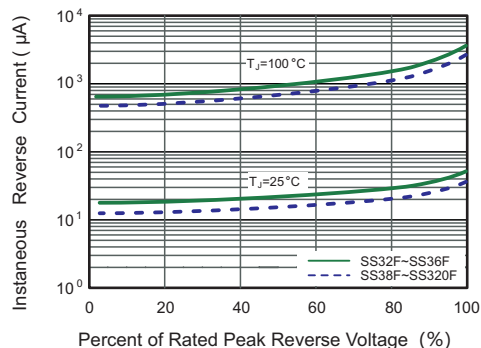


Fig.3 Typical Forward Characteristic

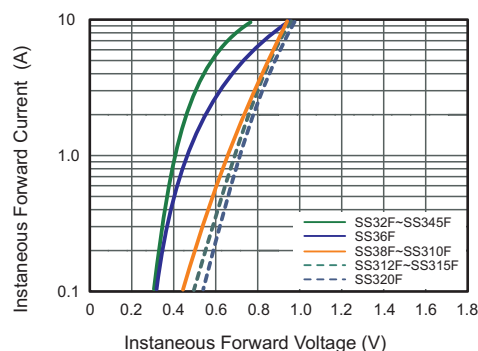


Fig.4 Typical Junction Capacitance

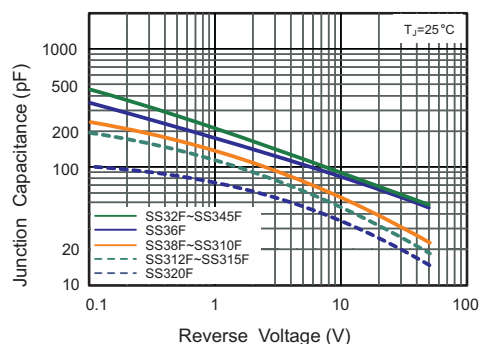
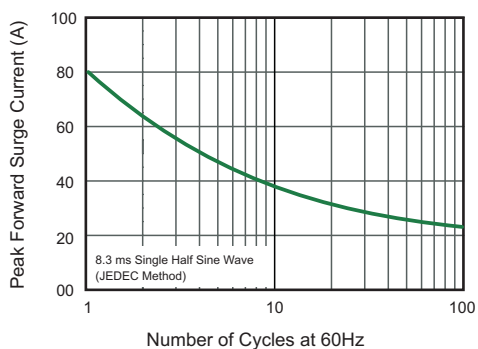


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram



Ordering information

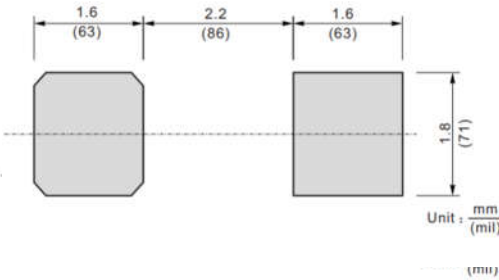
Package	Packing Description	Packing Quantity
SMAF	Tape/Reel, 7" reel	3000PCS/Reel 90000PCS/Carton

Package Dimensions

SMAF

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.1	35	43
C	0.12	0.20	4.7	7.9
D	3.3	3.7	130	146
E	2.4	2.7	94	106
e	1.3	1.6	51	63
g	0.8	1.2	31	47
HE	4.4	4.9	173	193
∠	7°			

The recommended mounting pad size



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