

## Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

Forward Current - 3 A

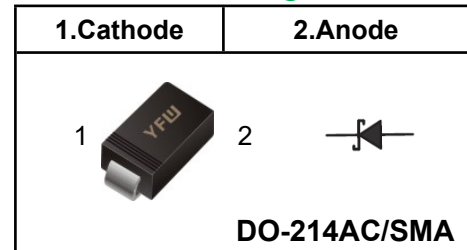
### FEATURES

- ◆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: DO-214AC/SMA
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.07g/0.002oz

### Pinning



### Marking Code

<b>SS32</b>	<b>YFW SS32</b>
<b>SS34</b>	<b>YFW SS34</b>
<b>SS36</b>	<b>YFW SS36</b>
<b>SS38</b>	<b>YFW SS38</b>
<b>SS310</b>	<b>YFW SS310</b>
<b>SS312</b>	<b>YFW SS312</b>
<b>SS315</b>	<b>YFW SS315</b>
<b>SS320</b>	<b>YFW SS320</b>

#### Absolute Maximum Ratings and Electrical characteristics

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

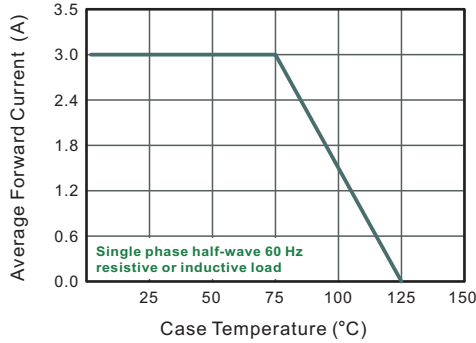
Parameter	Symbols	SS32	SS34	SS36	SS38	SS310	SS312	SS315	SS320	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified 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
Maximum Instantaneous Forward Voltage at 3 A	$V_F$	0.55	0.70		0.85		0.90			V
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage <small><math>T_A = 25^{\circ}C</math> <math>T_A = 100^{\circ}C</math></small>	$I_R$	0.5 5			0.3 3					mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	450			400					pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	70								°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

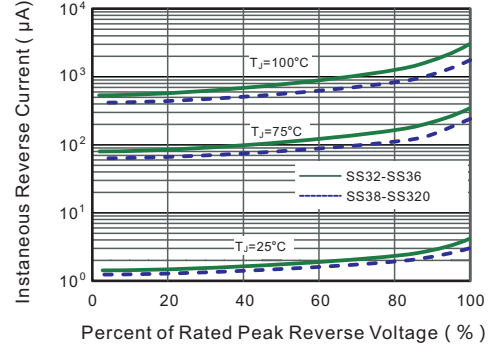
(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

**Ratings And Characteristic Curves**

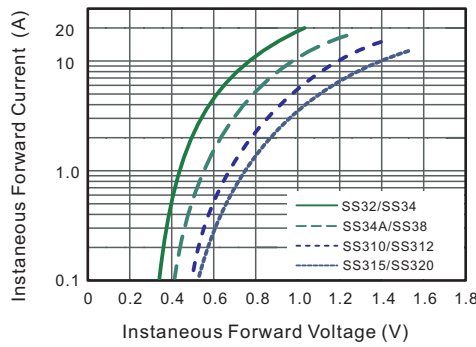
**Fig.1 Forward Current Derating Curve**



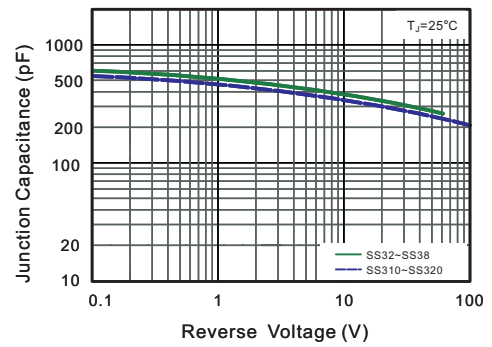
**Fig.2 Typical Reverse Characteristics**



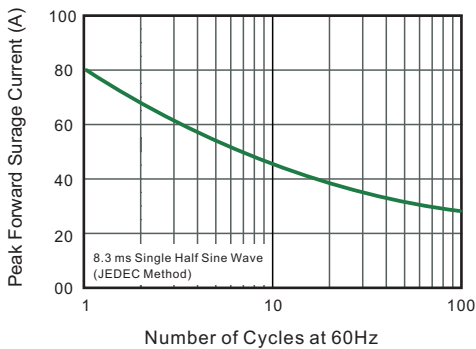
**Fig.3 Typical Forward Characteristic**



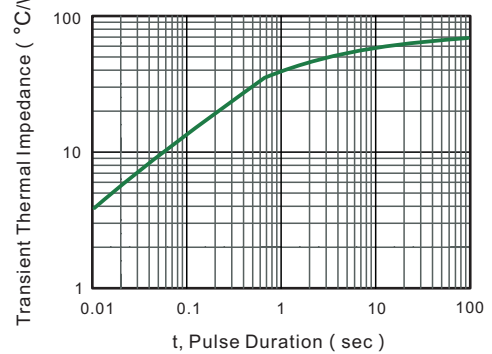
**Fig.4 Typical Junction Capacitance**



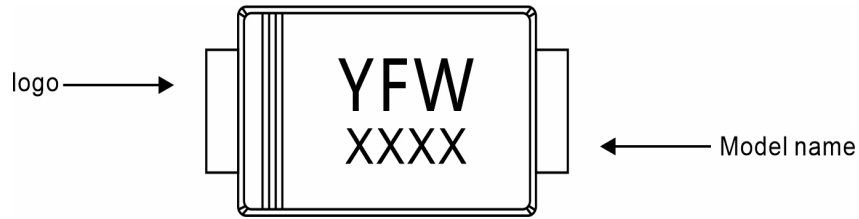
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.5- Typical Transient Thermal Impedance**



**Marking Diagram**



**Ordering information**

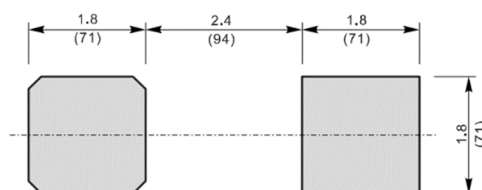
Package	Packing Description	Packing Quantity
DO-214AC SMA	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton
	Tape/Reel, 7" reel	2000PCS/Reel 50000PCS/Carton

**Package Dimensions**

**DO-214AC SMA**

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.9	2.45	75	96
D	4.0	4.5	157	181
E	2.5	2.8	100	110
H <sub>E</sub>	4.7	5.2	185	205
c	0.15	0.31	6	12
e	1.3	1.8	51	71
g	0.9	1.5	35	59
b	0.05	0.2	2	7.9
a	0.3		12	

**The recommended mounting pad size**



Unit :  $\frac{\text{mm}}{\text{mil}}$

## Disclaimer

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