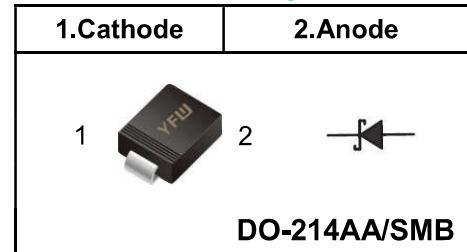


**Surface Mount Schottky Barrier Rectifier**
**Reverse Voltage - 45 V**
**Forward Current - 10 A**
**FEATURES**

- ◆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-214AA/SMB
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.095g / 0.003oz

**Pinning**

**Marking Code**

<b>SS1045B</b>	<b>SS1045</b>
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**Maximum Ratings and Electrical characteristics**

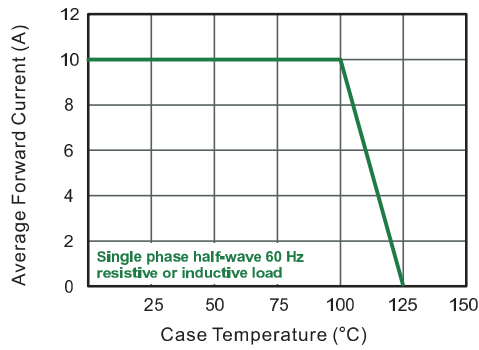
Ratings at 25C ° ambient temperature unless otherwise specified.Single phase, half wave, 60Hz resistive or inductive load,for capacitive load, derate by 20 %

Parameter	Symbols	SS1045B	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	45	V
Maximum RMS voltage	$V_{RMS}$	32	V
Maximum DC Blocking Voltage	$V_{DC}$	45	V
Maximum Average Forward Rectified Current at $T_c = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	$I_{FSM}$	150	A
Maximum Instantaneous Forward Voltage at 10 A	$V_F$	0.55	V
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	$I_R$	0.5 50	mA
Typical Junction Capacitance (1)	$C_j$	500	pF
Operating Junction Temperature Range	$T_j$	-55 ~ +125	°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150	°C

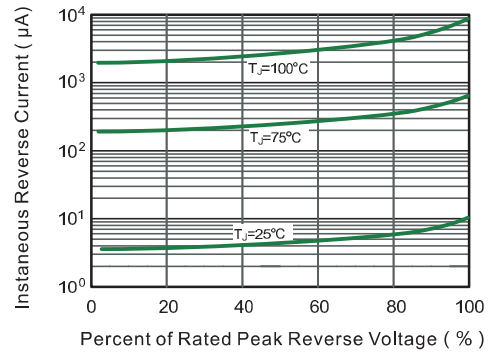
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

**Ratings and Characteristic Curves**

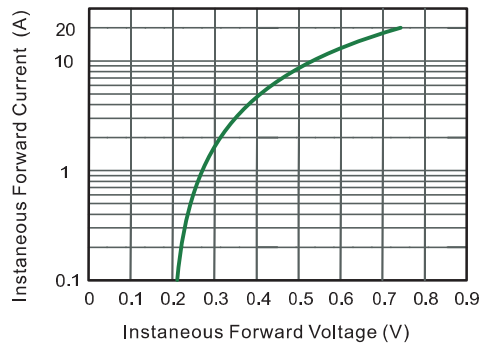
**Fig.1 Forward Current Derating Curve**



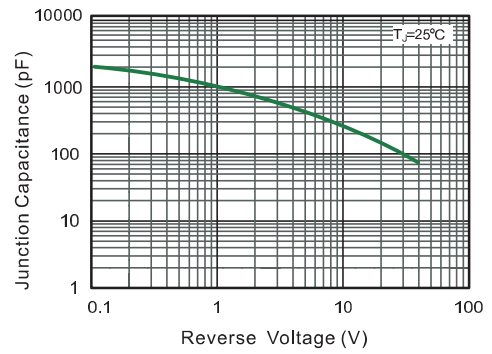
**Fig.2 Typical Reverse Characteristics**



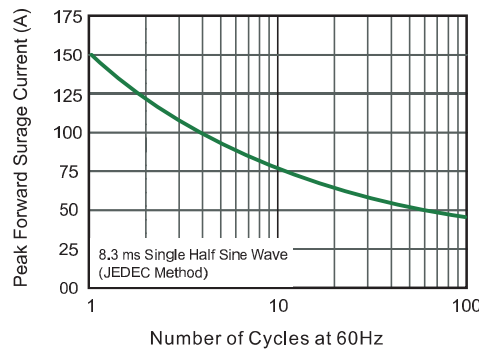
**Fig.3 Typical Forward Characteristic**



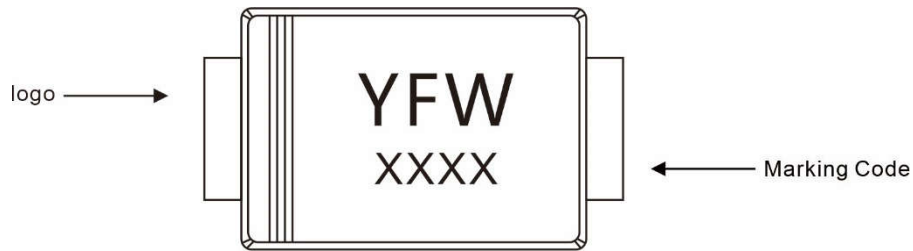
**Fig.4 Typical Junction Capacitance**



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



**Marking Diagram**



**Ordering information**

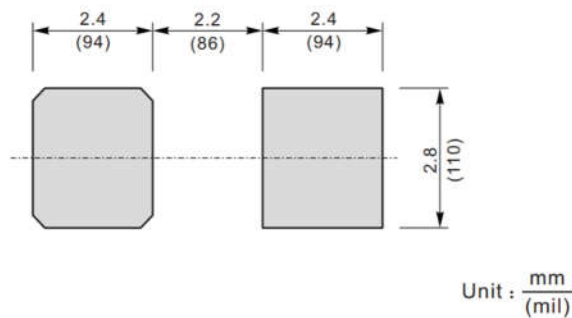
Package	Packing Description	Packing Quantity
DO-214AA SMB	Tape/Reel, 13"reel	3000PCS/Reel 30000PCS/Carton

**Package Dimensions**

**DO-214AA SMB**

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	2.13	2.44	84	96
E	4.06	4.70	160	185
D	3.3	3.94	130	155
E <sub>1</sub>	5.08	5.59	200	220
A <sub>1</sub>	0.05	0.20	2.0	7.9
L	0.8	1.5	32	59
C	0.152	0.305	6	12
b	1.9	2.2	75	87

**The recommended mounting pad size**



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