

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

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

1.Cathode	2.Anode
	
DO-214AA/SMB	

Marking Code

SS32B	YFW SS32
SS34B	YFW SS34
SS36B	YFW SS36
SS38B	YFW SS38
SS310B	YFW SS310
SS312B	YFW SS312
SS315B	YFW SS315
SS320B	YFW SS320

Parameter	Symbols	SS32B	SS34B	SS36B	SS38B	SS310B	SS312B	SS315B	SS320B	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^2t Rating for fusing(3ms≤t≤8.3ms)	I^2t	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 $T_A = 25^{\circ}C$ 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	135		107	83		68		50	pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	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

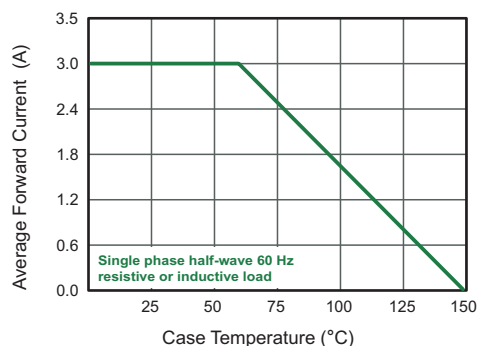


Fig.2 Typical Reverse Characteristics

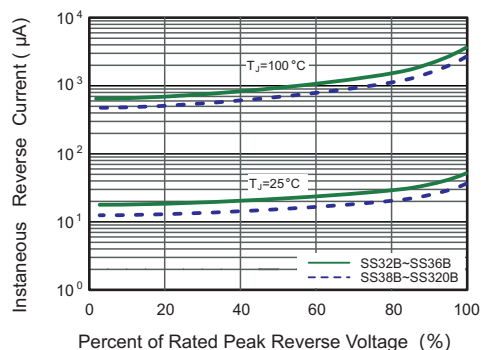


Fig.3 Typical Forward Characteristic

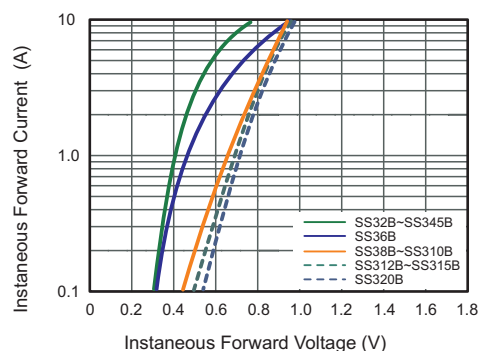


Fig.4 Typical Junction Capacitance

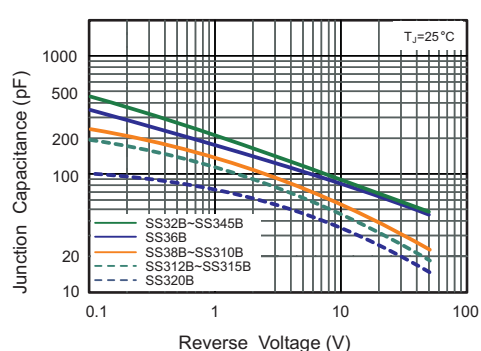
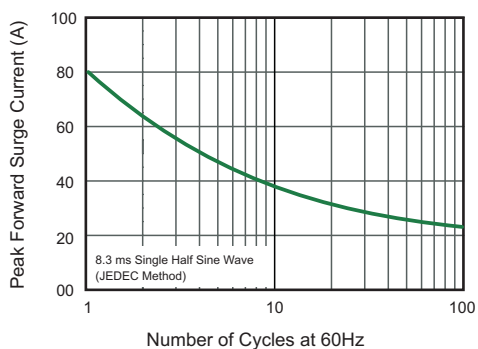
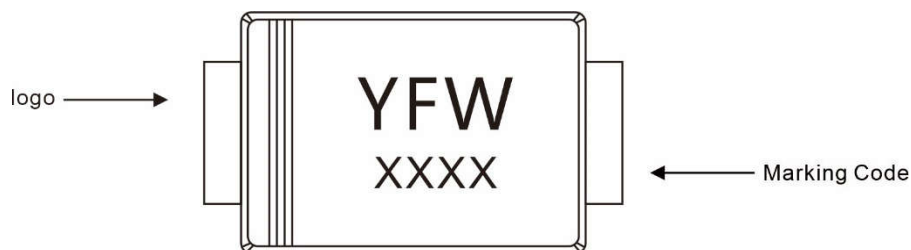


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram



Ordering information

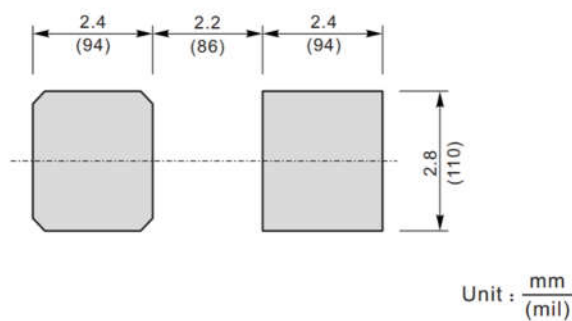
Package	Packing Description	Packing Quantity
DO-214AA SMB	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

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 ₁	5.08	5.59	200	220
A ₁	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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