

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

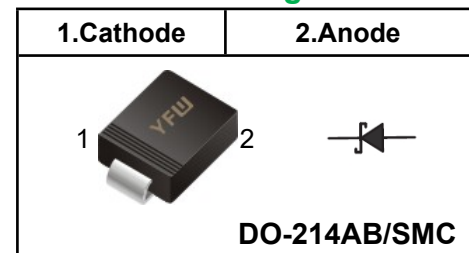
MECHANICAL DATA

- ◆Case: DO-214AB/SMC
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.22g / 0.0077oz

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

SS32C	YFW SS32
SS34C	YFW SS34
SS36C	YFW SS36
SS38C	YFW SS38
SS310C	YFW SS310
SS312C	YFW SS312
SS315C	YFW SS315
SS320C	YFW SS320

Parameter	Symbols	SS32C	SS34C	SS36C	SS38C	SS310C	SS312C	SS315C	SS320C	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

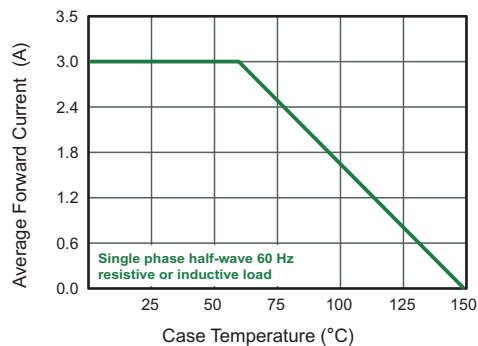


Fig.2 Typical Reverse Characteristics

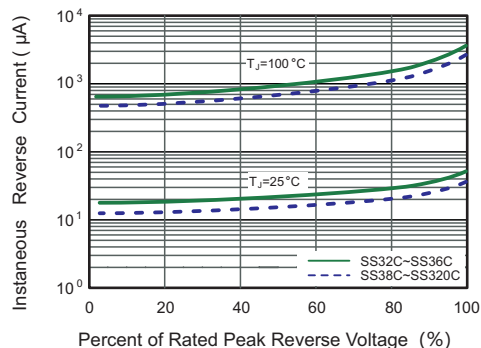


Fig.3 Typical Forward Characteristic

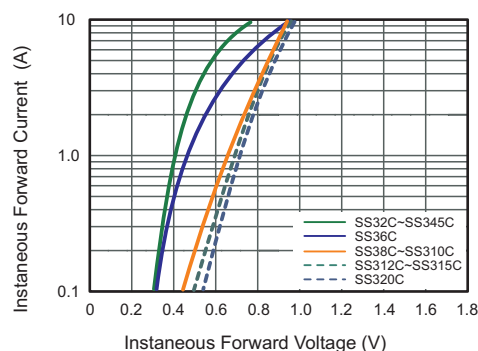


Fig.4 Typical Junction Capacitance

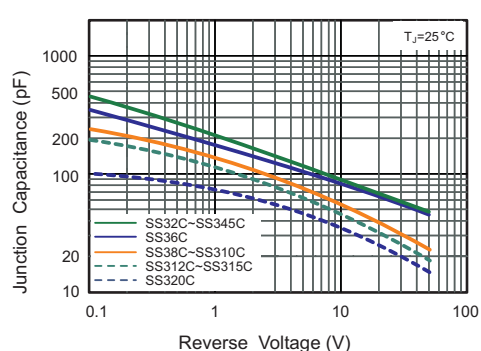
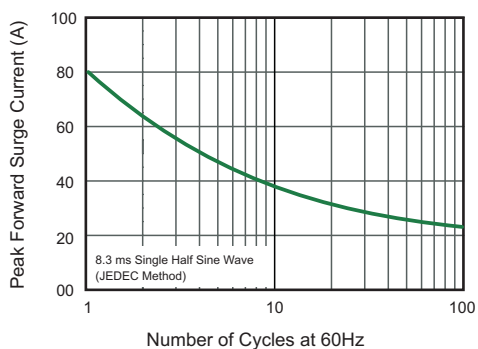
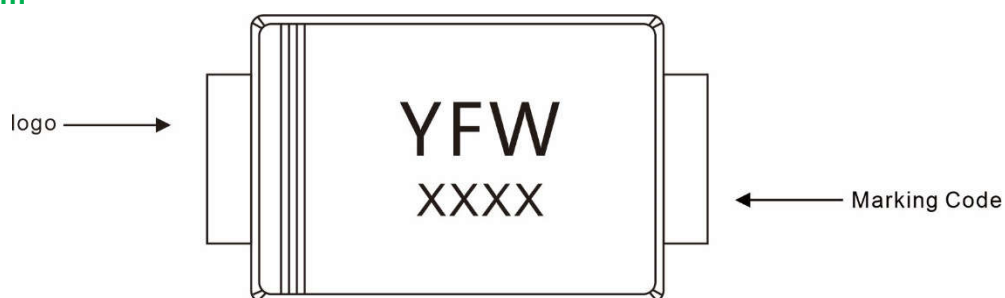


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram



Ordering information

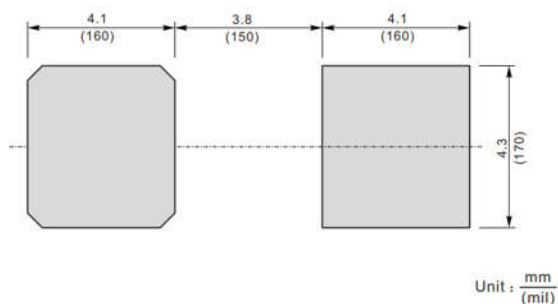
Package	Packing Description	Packing Quantity
DO-214AB SMC	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

Package Dimensions

DO-214AB SMC

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	2.00	2.62	79	103
E	6.5	7.0	256	276
D	5.6	6.2	220	244
E ₁	7.6	8.0	299	315
A ₁	0.05	0.21	2.0	8.3
C	0.15	0.31	5.9	12
L	0.9	1.6	35	63
b	2.75	3.25	108	128

The recommended mounting pad size



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