

Surface Mount General Purpose Silicon Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 8 A

FEATURES

- ♦For surface mounted applications
- ♦Low profile package
- ♦Glass Passivated Chip Junction
- ♦Easy to pick and place
- ♦Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

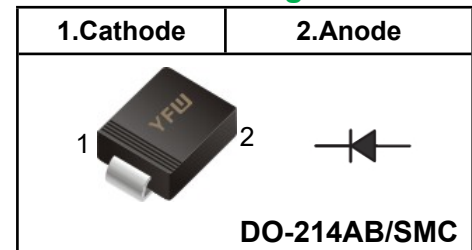
- ♦Case: DO-214AB/SMC
- ♦Terminals: Solderable per MIL-STD-750, Method 2026
- ♦Approx. Weight: 0.22g / 0.0077oz

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Pinning



Marking Code

S8AC	YFW S8A
S8BC	YFW S8B
S8DC	YFW S8D
S8GC	YFW S8G
S8JC	YFW S8J
S8KC	YFW S8K
S8MC	YFW S8M

Parameter	Symbols	S8AC	S8BC	S8DC	S8GC	S8JC	S8KC	S8MC	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_c = 115\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	8							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	200							A
Maximum Instantaneous Forward Voltage at 8 A	V_F	0.985							V
Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 125\text{ }^{\circ}\text{C}$	I_R	10 250							μA
Typical Junction Capacitance ⁽¹⁾	C_j	40							pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}/R_{\theta JC}$	35/13							$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^{\circ}\text{C}$

(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.

Fig.1 Forward Current Derating Curve

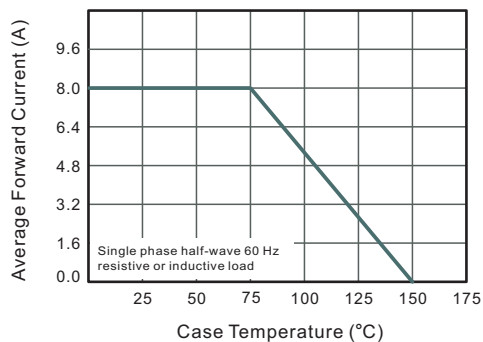


Fig.2 Typical Reverse Characteristics

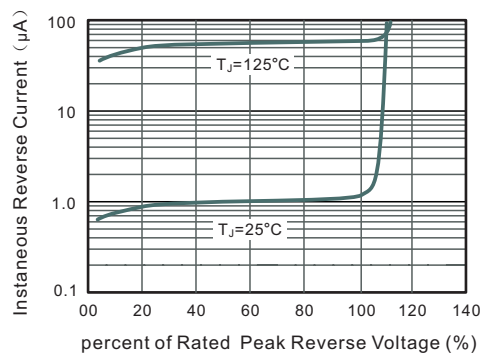


Fig.3 Typical Forward Characteristic

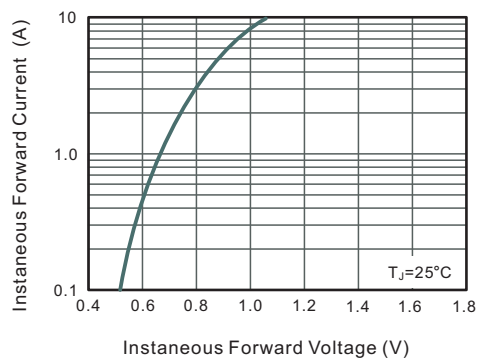


Fig.4 Typical Junction Capacitance

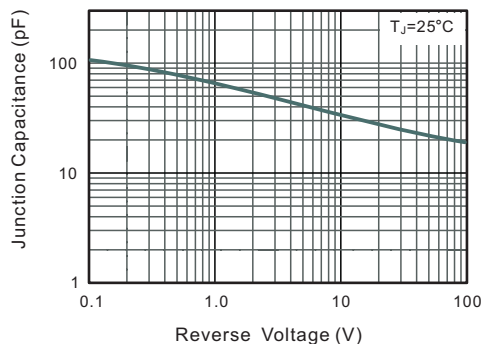
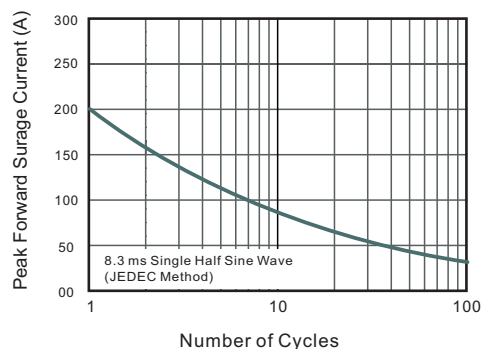
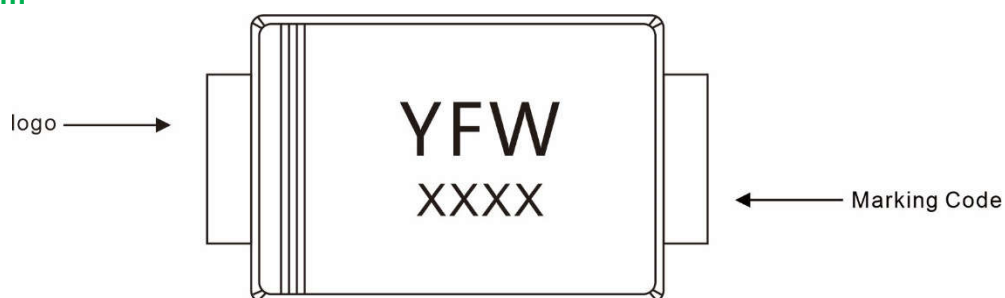


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram



Ordering information

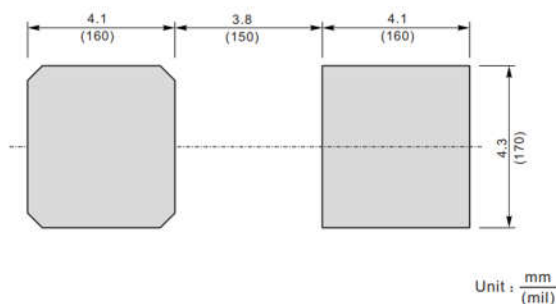
Package	Packing Description	Packing Quantity
DO-214AB SMC	Tape/Reel, 13"reel	3000PCS/Reel 30000PCS/Carton

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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