

Surface Mount Superfast Recovery Rectifier

Reverse Voltage - 1000 V

Forward Current - 8 A

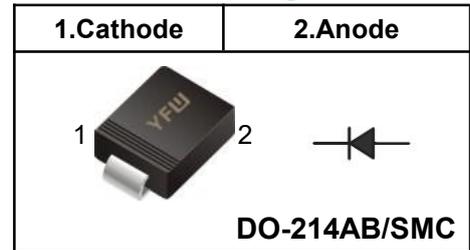
FEATURES

- ◆Glass Passivated Chip Junction
- ◆For surface mounted applications
- ◆Low profile package
- ◆Superfast reverse recovery time
- ◆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

Pinning



Marking Code

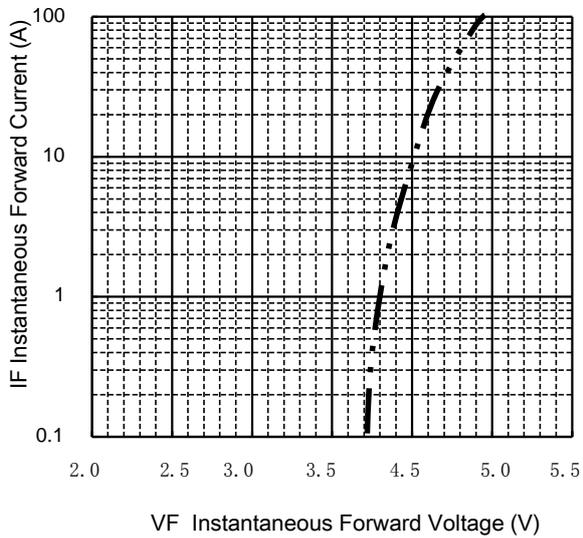
ES8MC	YFW ES8M
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Absolute Maximum Ratings and characteristics

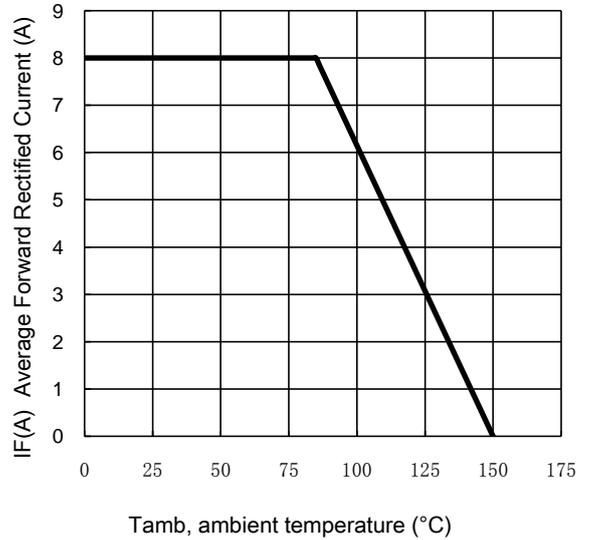
Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	ES8MC	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	8.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage at 8 A	V_F	4.5	V
Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 125\text{ °C}$	I_R	5 100	μA
Maximum Reverse Recovery Time	T_{rr}	35	nS
Typical thermal resistance	$R_{\theta JA}$	65	°C/W
Typical Junction Capacitance at $V_R=4V, f=1MHz$	C_j	280	pF
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

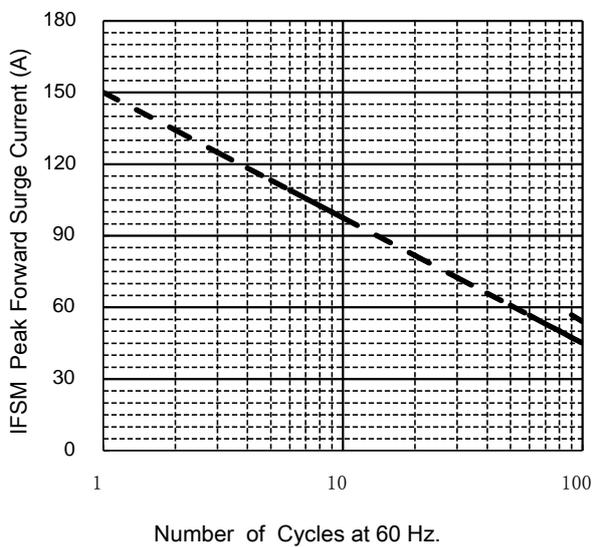
FORWARD CHARACTERISTIC



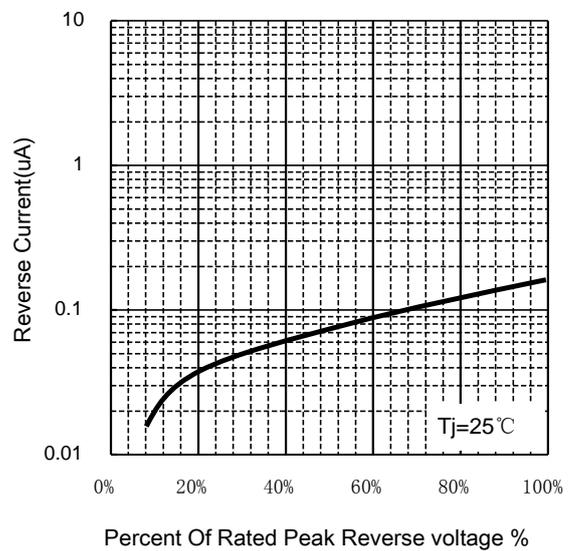
FORWARD CURRENT DERATING CURVE



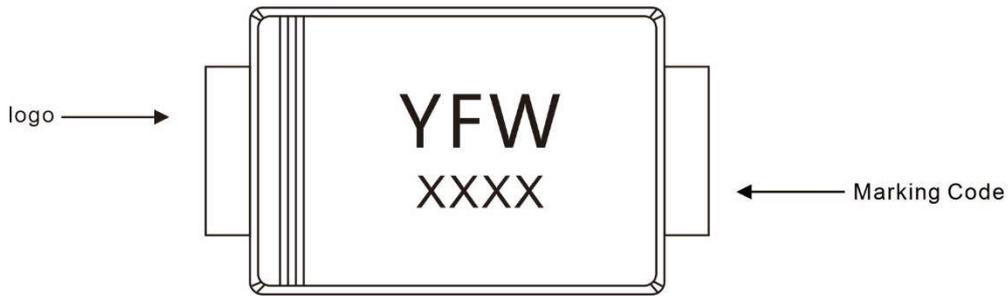
**MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT**



Typical Reverse Characteristics



Marking Diagram



Ordering information

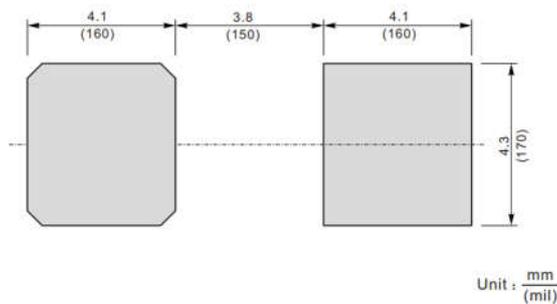
Package	Packing Description	Packing Quantity
DO-214AB SMC	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

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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