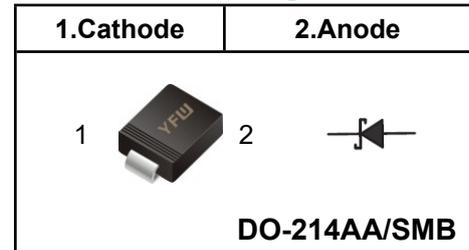


Surface Mount Super fast Recovery Rectifier
Reverse Voltage - 1000 V
Forward Current - 3 A
FEATURES

- ◆ Low reverse leakage
- ◆ High forward surge capability
- ◆ High reliability
- ◆ High temperature soldering guaranteed: 260°C/10seconds
- ◆ Lead and body according with RoHS standard
- ◆ Green compound with suffix "-F" on Marking

MECHANICAL DATA

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

Pinning

Marking Code

ES3MB	YFW ES3M
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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 %.

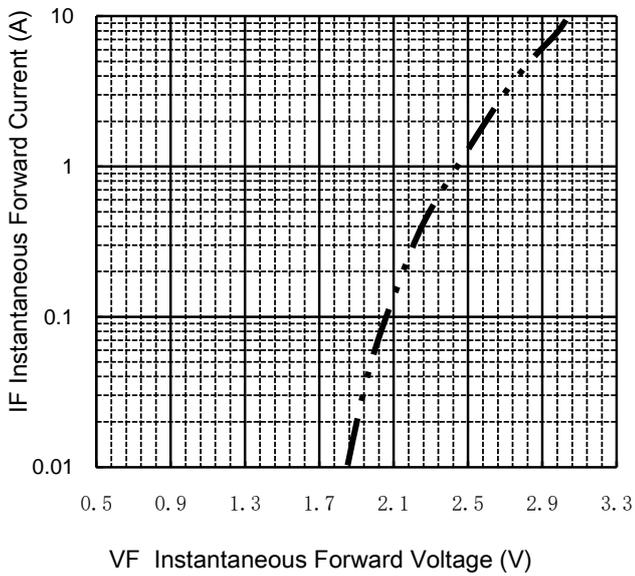
Parameter	Symbols	ES3MB	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	60	A
Maximum Instantaneous Forward Voltage at 3 A	V_F	3.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ }^\circ\text{C}$ $T_a = 125\text{ }^\circ\text{C}$	I_R	5 100	μA
MAX. reverse recovery time (1)	T_{rr}	35	nS
Typical thermal resistance (Note 1)	$R_{\theta JA}$	85	$^\circ\text{C/W}$
Typical Junction Capacitance at $V_R=4\text{V}, f=1\text{MHz}$	C_j	60	pF
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^\circ\text{C}$

(1) Measured with $I_F=0.5\text{A}, I_R=1\text{A}, I_n=0.25\text{A}$

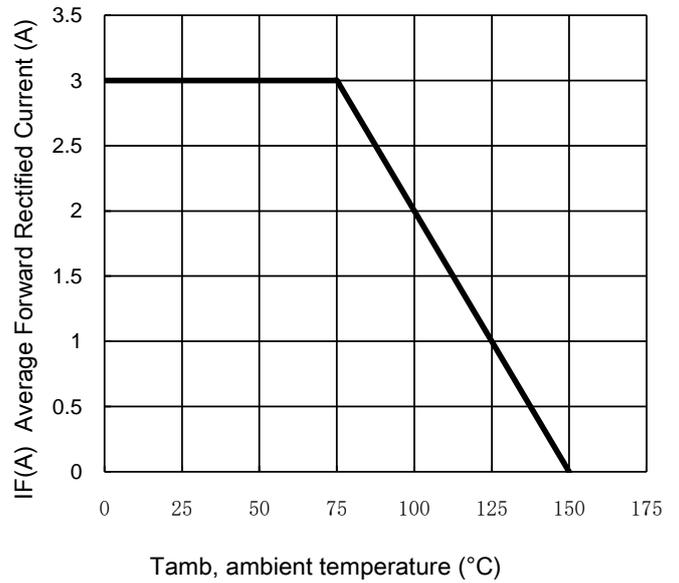
(2) Thermal resistance from junction to ambient, PCB mounted.

Characteristic Curves

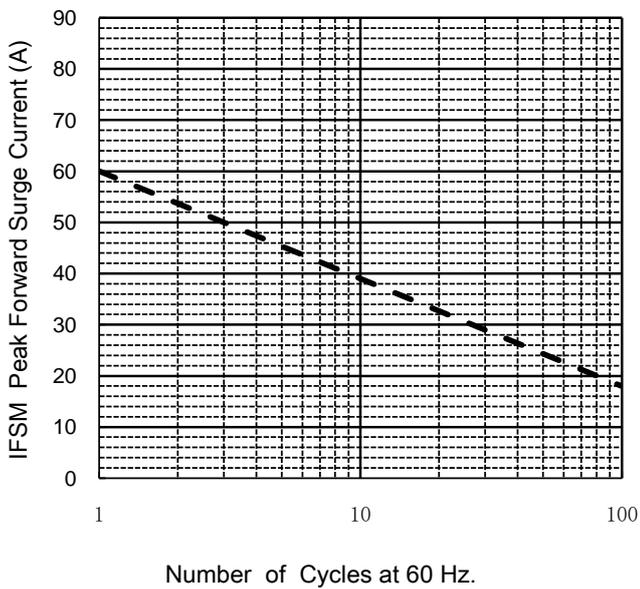
TYPICAL FORWARD CHARACTERISTIC



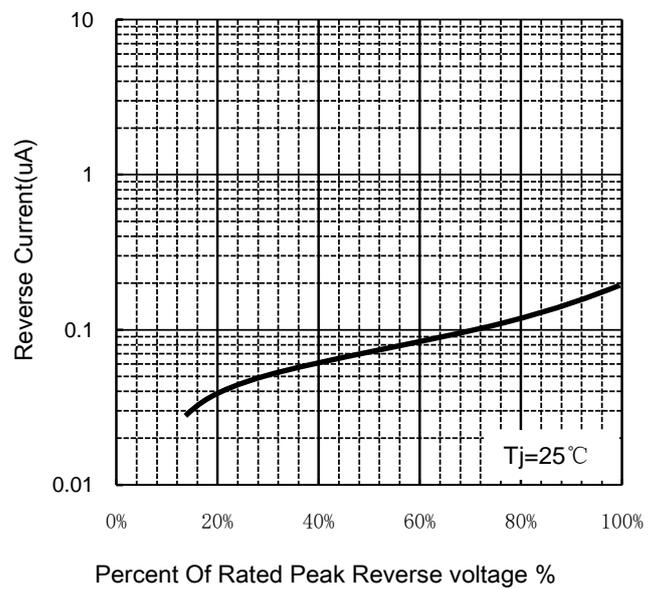
FORWARD CURRENT DERATING CURVE



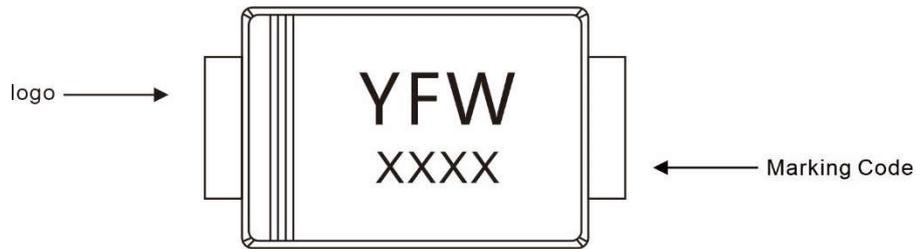
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTICS



Marking Diagram



Ordering information

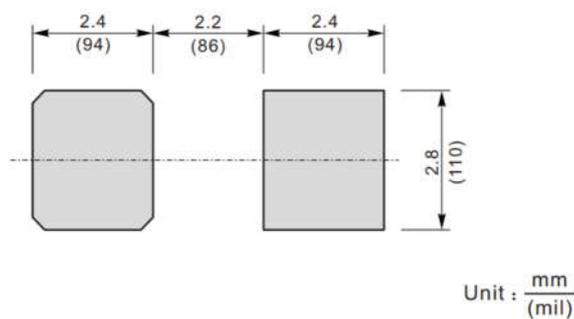
Package	Packing Description	Packing Quantity
DO-214AA SMB	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

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



Disclaimer

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