

Surface Mounted High-efficiency Rectifiers

Reverse Voltage - 1200 V

Forward Current - 2.0 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

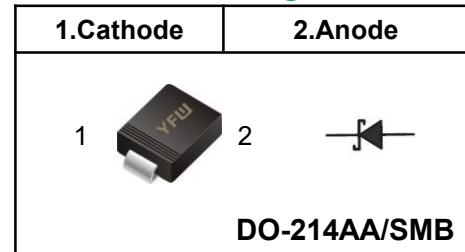
MECHANICAL DATA

- ◆ Case: DO-214AA/SMB
- ◆ Epoxy: UL 94V-0 rate flame retardant
- ◆ Approx. Weight: 0.095g / 0.003oz

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 %.

Pinning



Marking Code

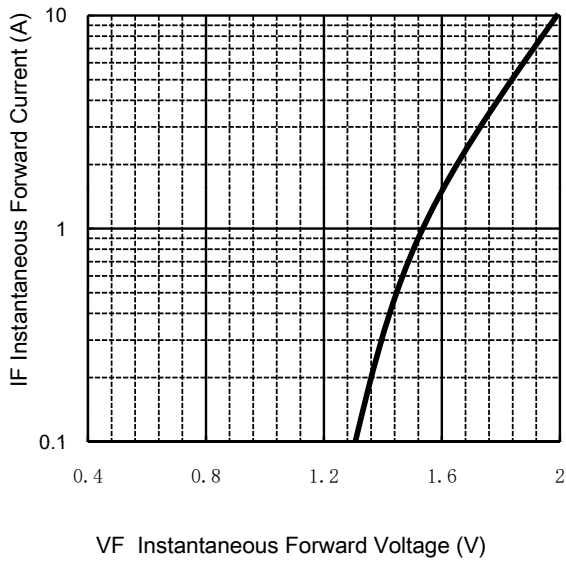
US2QB	YFW US2Q
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Parameter	Symbols	US2QB	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1200	V
Maximum RMS voltage	V_{RMS}	840	V
Maximum DC Blocking Voltage	V_{DC}	1200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0	A
Non-repetitive peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	40	A
Power dissipation	P_D	1.2	W
Maximum Instantaneous Forward Voltage at 2 A	V_F	1.9	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 $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{RR} = 0.25\text{ A}$	T_{rr}	75	nS
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	105	$^\circ\text{C/W}$
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	$^\circ\text{C}$

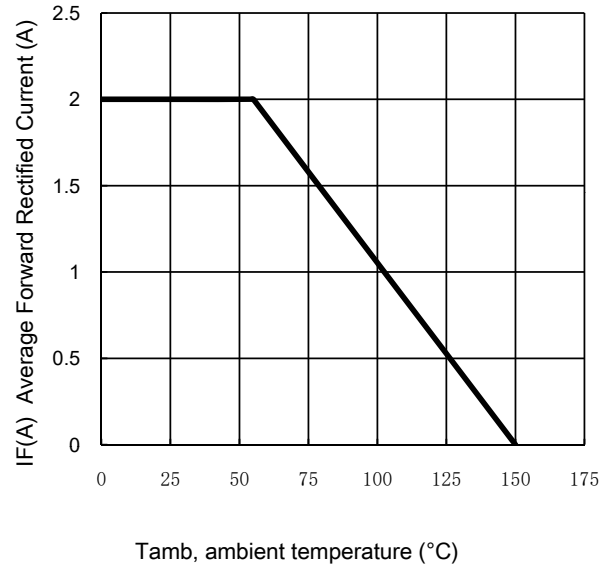
1) Thermal resistance from junction to ambient, PCB mounted.

Characteristic Curves

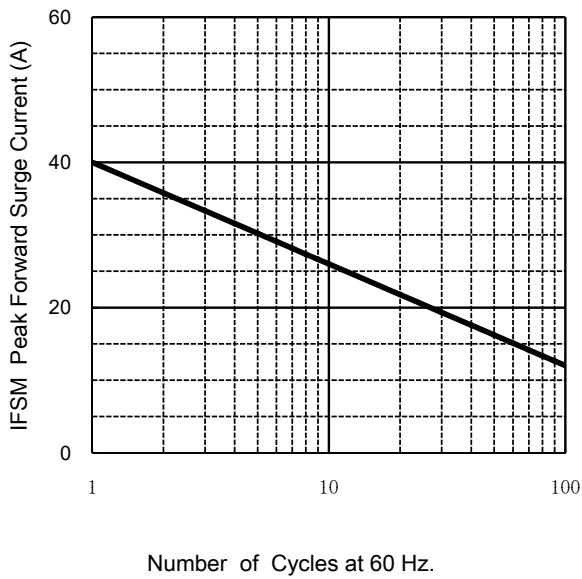
TYPICAL FORWARD CHARACTERISTIC



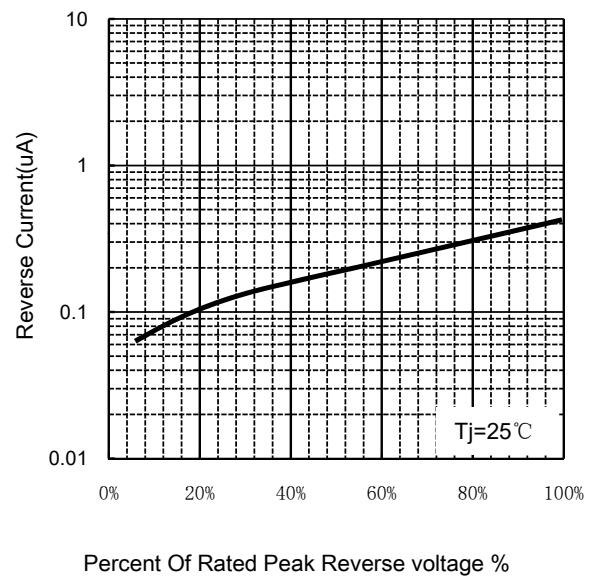
FORWARD CURRENT DERATING CURVE



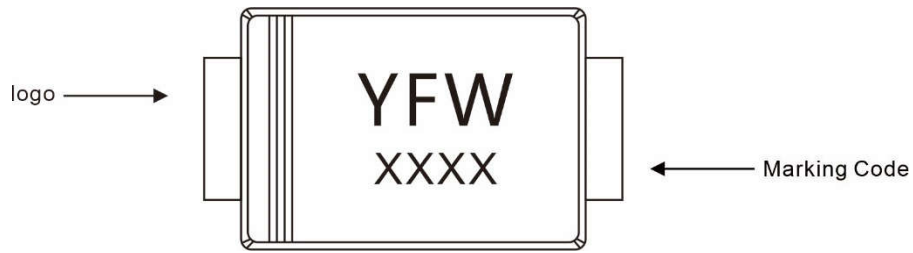
**MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT**



Typical Reverse Characteristics



Marking Diagram



Ordering information

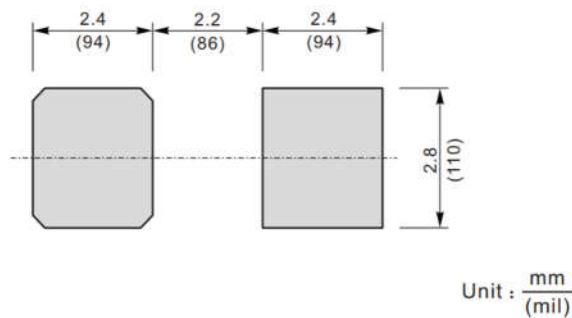
Package	Packing Description	Packing Quantity
DO-214AA SMB	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

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



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