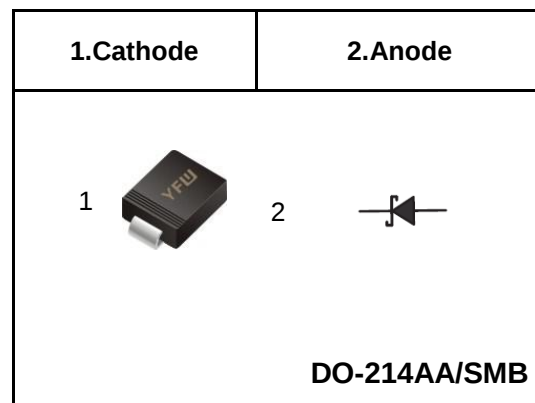


Trench Barrier Schottky Rectifier
Reverse Voltage - 150 V
Forward Current - 5 A
FEATURES

- ◆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-214AA/SMB
- ◆Terminals: Solderable per MIL-STD-750, Method 2026

Pinning

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Parameter	Symbols	5S150B	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	120	A
Typical Thermal Resistance per diode (Mounted on FR-4 PCB)	$R_{\theta JC}$	22	°C/W
Operating junction and storage temperature range	T_J, T_{stg}	-40 ~ +150	°C

Electrical Characteristics (Per Leg) unless otherwise specified

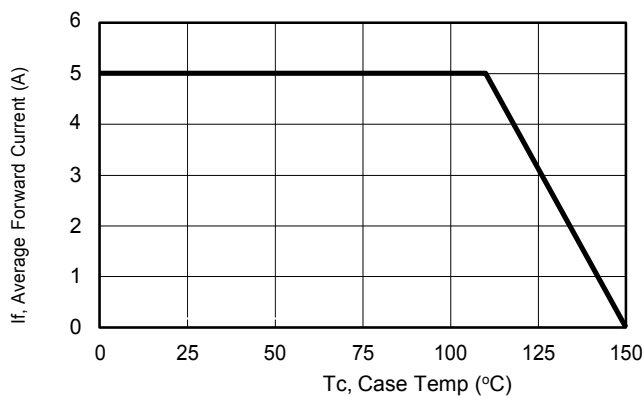
Characteristics		Symbols	Value		Units
Forward Voltage Drop		V_F	Typ	Max	V
at $I_F=1A$ Instantaneous forward voltage per diode	TA=25°C		0.53	0.60	
	TA=125°C		0.48	-	
at $I_F=5A$ Instantaneous forward voltage per diode	TA=25°C		0.89	0.95	
	TA=125°C		0.82	-	
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	I_R	5	10	uA
	TA=125°C		-	5	mA

Notes:

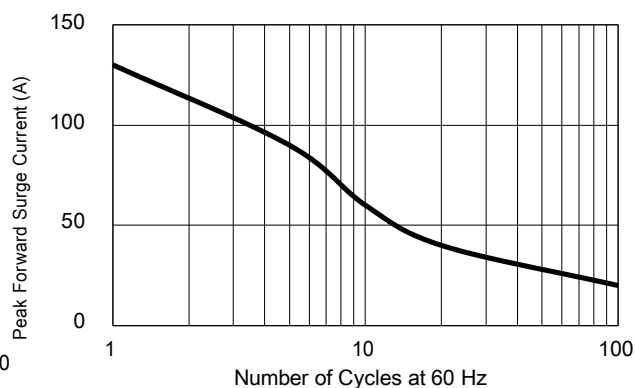
(1) Pulse test: 300 μ s pulse width, 1 % duty cycle

(2) Pulse test: Pulse width $\leq$ 40 ms

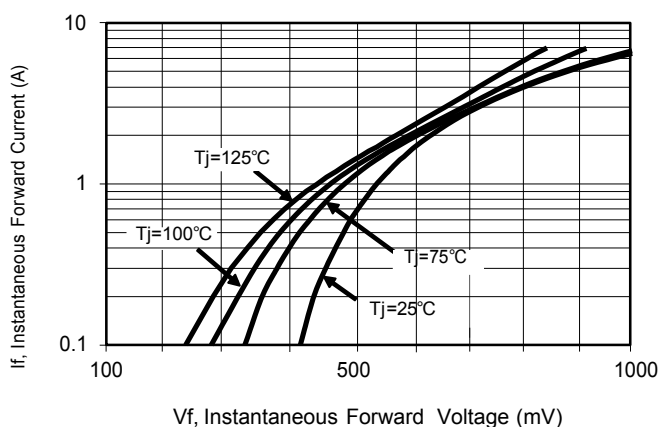
RATINGS AND CHARACTERISTICS CURVES



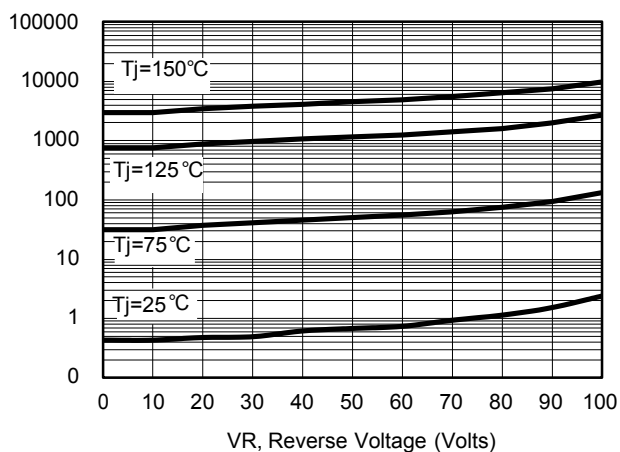
Current Derating, Case



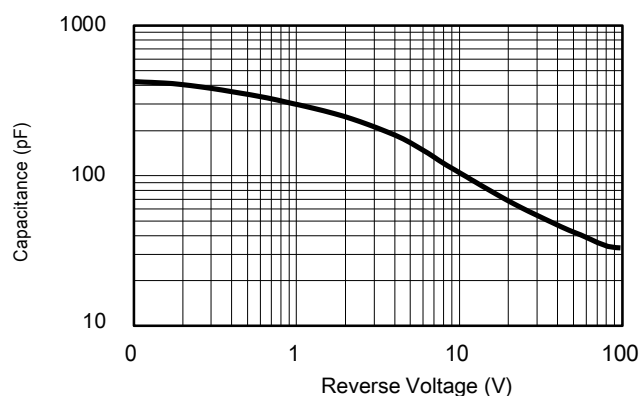
Maximum Repetitive Surge Current



Typical Forward Voltage

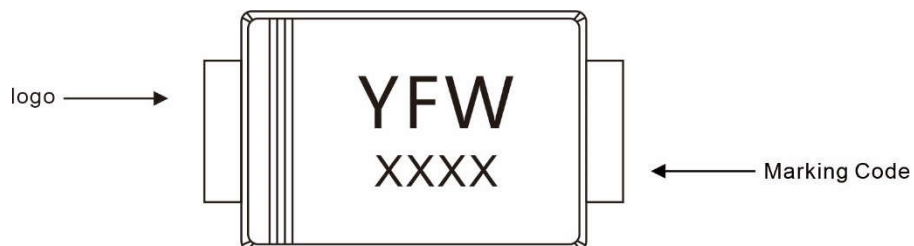


Typical Reverse Current



Typical Junction Capacitance

Marking Diagram



Ordering information

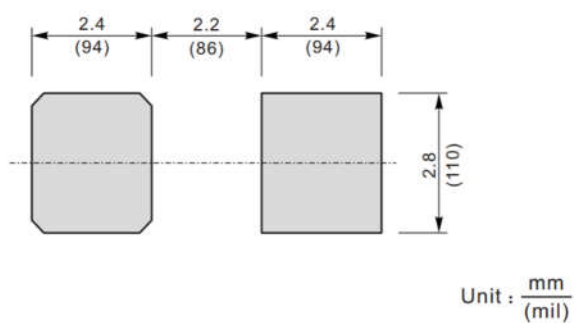
Package	Packing Description	Packing Quantity
DO-214AA SMB	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

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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