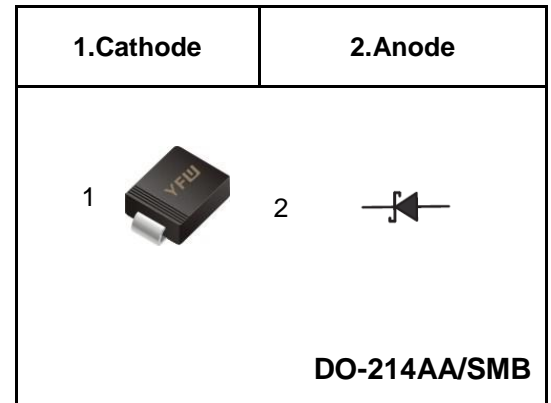


**Trench Barrier Schottky Rectifier**
**Reverse Voltage - 150 V**
**Forward Current - 5 A**
**FEATURES**

- ◆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


**Pinning**

**MECHANICAL DATA**

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

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

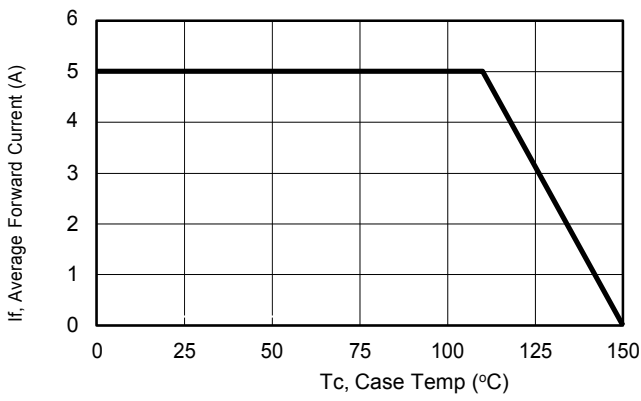
Parameter	Symbols	5S150	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	150	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	$I_{FSM}$	120	A
Typical Thermal Resistance per diode (Mounted 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**

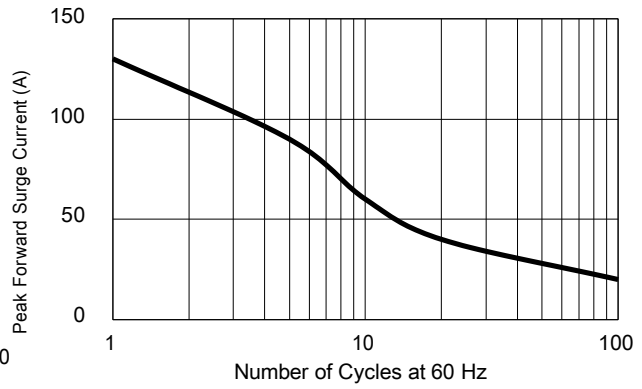
Characteristics		Symbols	Value		Units
			Typ	Max	
Forward Voltage Drop	TA=25°C	$V_F$	0.53	0.60	V
	TA=125°C		0.48	-	
at $I_F=1A$ Instantaneous forward voltage per diode	TA=25°C		0.89	0.95	
	TA=125°C		0.82	-	
Instantaneous reverse current per diode at rated reverse voltage	TA=25°C	$I_R$	5	10	uA
	TA=125°C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

Notes:  
 (1) Pulse test: 300  $\mu$ s pulse width, 1 % duty cycle  
 (2) Pulse test: Pulse width  $\leq$  40 ms

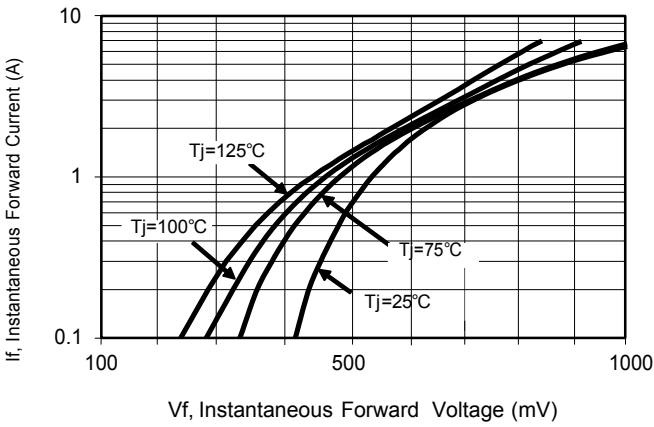
**RATINGS AND CHARACTERISTICS CURVES**



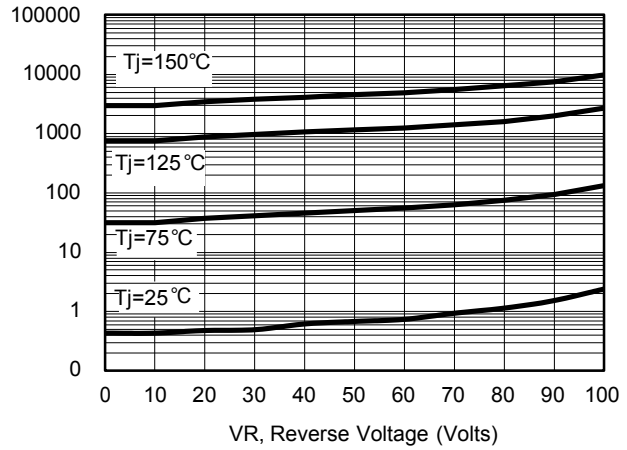
**Current Derating, Case**



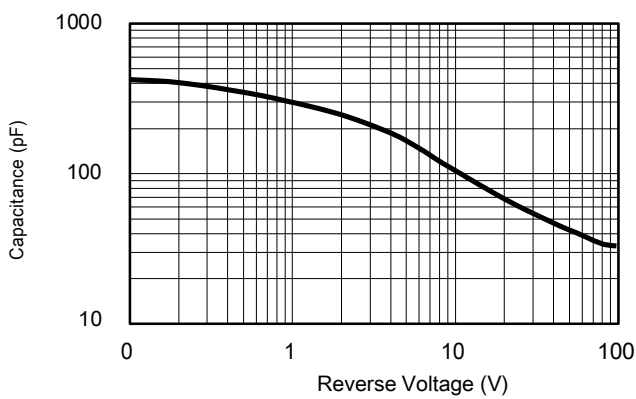
**Maximum Repetitive Surge Current**



**Typical Forward Voltage**



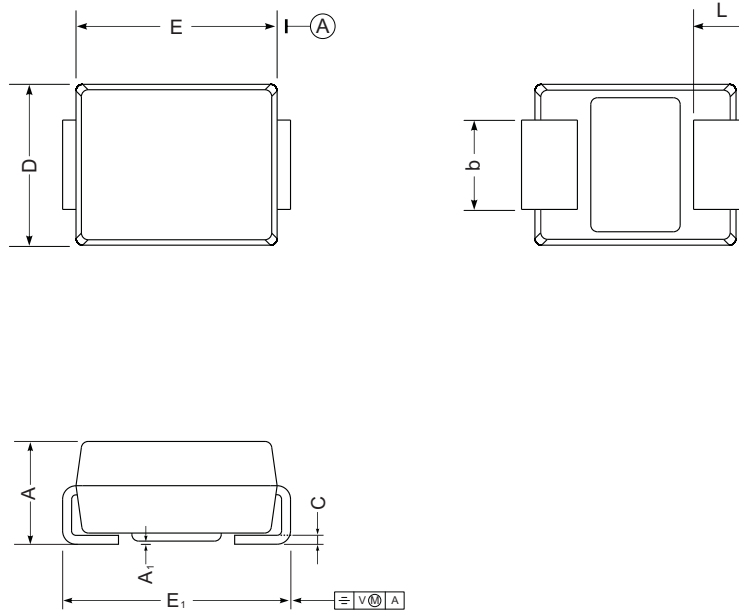
**Typical Reverse Current**



**Typical Junction Capacitance**

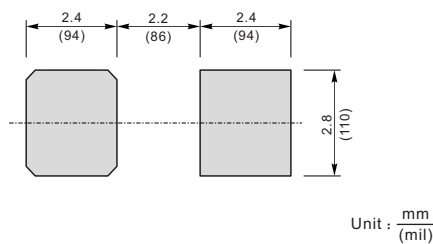
**Package Outline DO-214AA SMB**

Plastic surface mounted package; 2 leads



UNIT		A	E	D	E <sub>1</sub>	A <sub>1</sub>	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75

**The recommended mounting pad size**



**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
DO-214AA SMB	Tape/Reel, 13" reel	3000	EIA-481-1