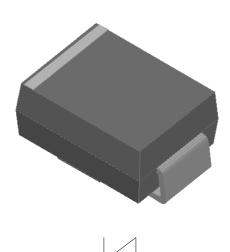




# **Surface Mount Schottky Rectifier**



#### **Features**

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- $\bullet$  Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

### **Typical Applications**

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

### **Mechanical Data**

 Package: DO-214AA (SMB)
 Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free

 Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

• Polarity: Cathode line denotes the cathode end

### ■Maximum Ratings (Ta=25°C Unless otherwise specified)

J			
PARAMETER	SYMBOL	UNIT	SS14B
Device marking code			SS14B
Repetitive peak reverse voltage	$V_{RRM}$	٧	40
Average rectified output current @60Hz sine wave, resistance load, TL (FIG.1)	Io	Α	1.0
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, Ta=25°C	I <sub>FSM</sub>	Α	50
Storage temperature	$T_{stg}$	°C	-55 ~+150
Junction temperature	Tj	°C	-55~+125

### **■Electrical Characteristics** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS14B
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =1.0A	0.50
Maximum DC reverse current at rated DC blocking voltage per diode@ V <sub>RM</sub> =V <sub>RRM</sub>	I <sub>RRM</sub>	mΛ	Ta=25℃	0.50
		mA	Ta=100℃	10

Note1:Pulse test:300uS pulse widh,1% duty cycle

Note2:Pulse test:pulse widh 40mS

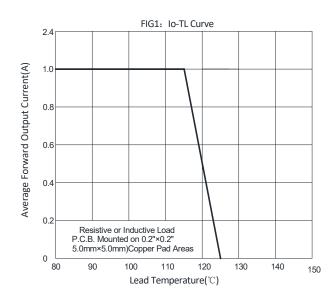


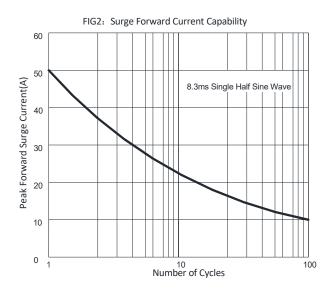
## ■Thermal Characteristics (Ta=25°C Unless otherwise specified)

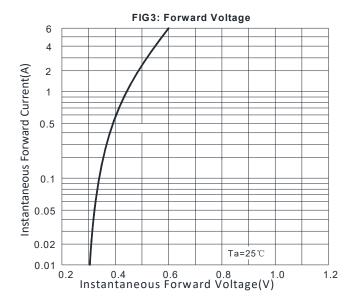
PARAMETER	SYMBOL	UNIT	SS14B
Thermal resistance	R <sub>0J-A</sub>	°C/W	75 <sup>(1)</sup>
	R <sub>θJ-L</sub>		17 <sup>(1)</sup>

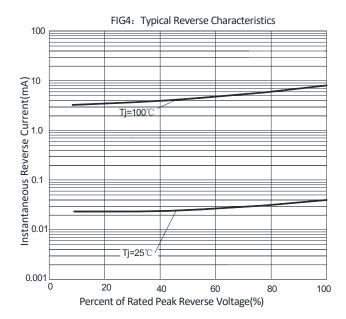
Note:

## ■ Characteristics(Typical)









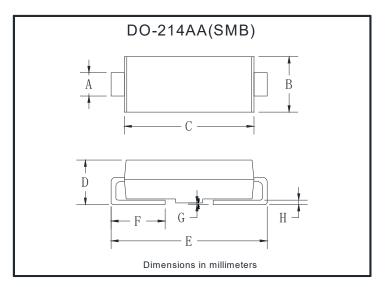
<sup>(1)</sup> Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



**■Ordering Information** (Example)

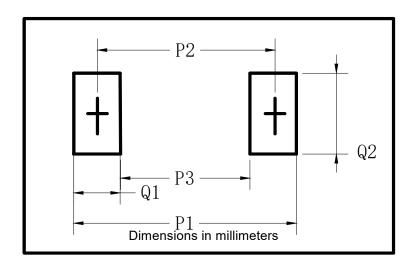
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS14B	F1	Approximate 0.097	3000	1	48000	13" reel
SS14B	F2	Approximate 0.097	750	3000	24000	7" reel
SS14B	F3	Approximate 0.097	500	2000	16000	7" reel

### **■ Outline Dimensions**



DO-214AA(SMB)			
Dim	Min	Max	
Α	1.85	2.15	
В	3.30	3.94	
С	4.05	4.75	
D	1.99	2.61	
E	5.21	5.59	
F	0.90	1.41	
G	0.05	0.20	
Н	0.15	0.31	

## ■ Suggested pad layout



DO-214AA(SMB)		
Dim	Millimeters	
P1	6.8	
P2	4.3	
P3	1.8	
Q1	2.5	
Q2	2.3	



## **SS14B**

#### **Disclaimer**

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http:// www.21yangjie.com , or consult your nearest Yangjie's sales office for further assistance.