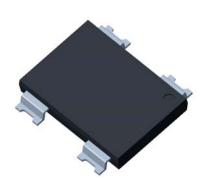
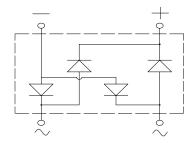




# **Bridge Rectifiers**





#### **Features**

- UL recognition, file #E313149
- Glass passivated chip junction
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

#### Typical Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

#### **Mechanical Data**

• Package: YBS2G

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: As marked on body

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

PARAMETER	SYMBOL	UNIT	YBSA30005	YBSA3001	YBSA3002	YBSA3004	YBSA3006	YBSA3008	YBSA3010	
Device marking code			YBSA30005	YBSA3001	YBSA3002	YBSA3004	YBSA3006	YBSA3008	YBSA3010	
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000	
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700	
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000	
Average rectified output current @60Hz sine wave, R-load, Tc=115°C	Ю	Α	3.0							
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave,1 cycle, Tj=25°C						110				
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C	IFSM	Α	220							
Current squared time @1ms≤t≤8.3ms Tj=25℃,Rating of per diode	l²t	A <sup>2</sup> s	50.2							
Storage temperature	T <sub>stg</sub>	°C	-55 ~ <b>+</b> 150							
Junction temperature	Tj	°C	-55 ~ +150							

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	YBSA30005	YBSA3001	YBSA3002	YBSA3004	YBSA3006	YBSA3008	YBSA3010
Maximum instantaneous forward voltage drop per diode	VF	٧	IFM=1.5A	1.0						
Maximum DC reverse current			T <sub>j</sub> =25°C	5						
at rated DC blocking voltage per diode	IR μA		Tj =125°C	100						
Typical junction capacitance	Cj	nF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	34						

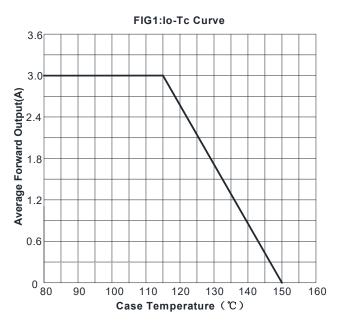
# **YBSA30005 THRU YBSA3010**

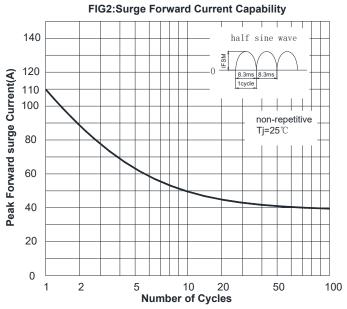
### **■Thermal Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

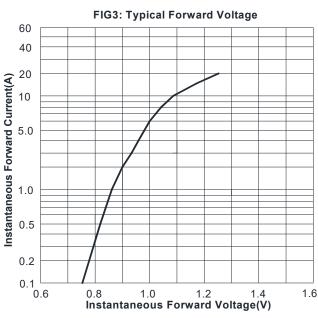
	PARAMETER	SYMBOL	UNIT	YBSA30005	YBSA3001	YBSA3002	YBSA3004	YBSA3006	YBSA3008	YBSA3010	
	Between Junction and Ambient	R <sub>0J-A</sub>		55							
Typical Thermal Resistance	Between Junction and Lead	R <sub>θJ-L</sub>	°C/W	11							
	Between Junction and Case	R <sub>θJ-C</sub>		7							

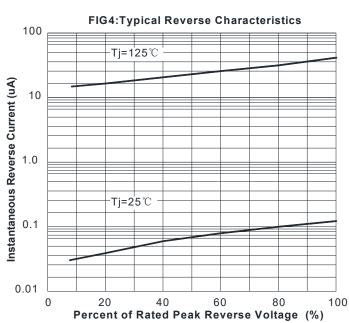
Note: Device mounted on P.C.B with 35mm\*25mm\*1.7mm.

## **■ Characteristics** (Typical)





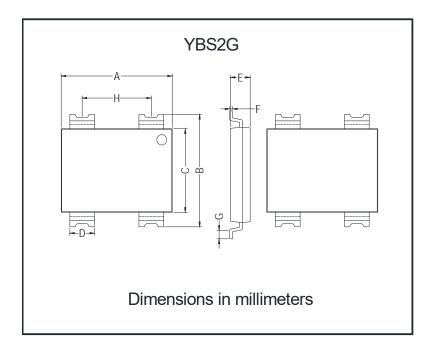






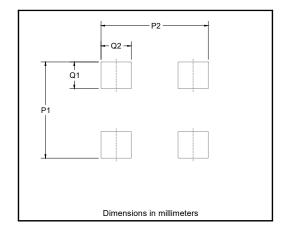
# **YBSA30005 THRU YBSA3010**

## ■ Outline Dimensions



YBS2G						
Dim	Min	Max				
Α	8.6	9.2				
В	8.3	8.9				
С	6.2	6.6				
D	1.85	2.15				
Е	1.35	1.75				
F	0.1	0.3				
G	0.4	0.8				
Н	5.4	5.8				

## ■ Suggested pad layout



YBS2G				
Dim	Min			
P1	11			
P2	7.8			
Q1	2.4			
02	2.2			



## YBSA30005 THRU YBSA3010

#### **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:// <a href="www.21yangjie.com">www.21yangjie.com</a>, or consult your nearest Yangjie's sales office for further assistance.