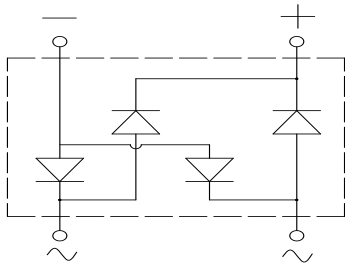
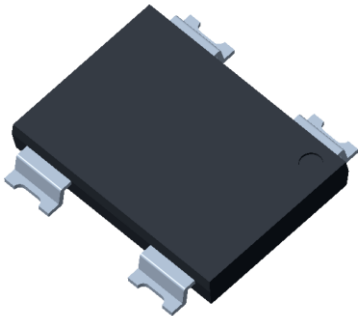


## Bridge Rectifiers



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

PARAMETER	SYMBOL	UNIT	YBSA20005	YBSA2001	YBSA2002	YBSA2004	YBSA2006	YBSA2008	YBSA2010
Device marking code			YBSA20005	YBSA2001	YBSA2002	YBSA2004	YBSA2006	YBSA2008	YBSA2010
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, T <sub>c</sub> =120°C	I <sub>O</sub>	A	2						
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave, 1 cycle, T <sub>j</sub> =25°C	IFSM	A	80						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T <sub>j</sub> =25°C			160						
Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	26.6						
Storage temperature	T <sub>stg</sub>	°C	-55 ~ +150						
Junction temperature	T <sub>j</sub>	°C	-55 ~ +150						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	YBSA20005	YBSA2001	YBSA2002	YBSA2004	YBSA2006	YBSA2008	YBSA2010
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	IFM=1.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>j</sub> =25°C	5						
			T <sub>j</sub> =125°C	100						
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	26						



# YBSA20005 THRU YBSA2010

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

PARAMETER		SYMBOL	UNIT	YBSA20005	YBSA2001	YBSA2002	YBSA2004	YBSA2006	YBSA2008	YBSA2010
Typical Thermal Resistance	Between Junction and Ambient	R <sub>θJ-A</sub>	°C/W	50						
	Between Junction and Lead	R <sub>θJ-L</sub>		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)

FIG1: I<sub>o</sub>-T<sub>c</sub> Curve

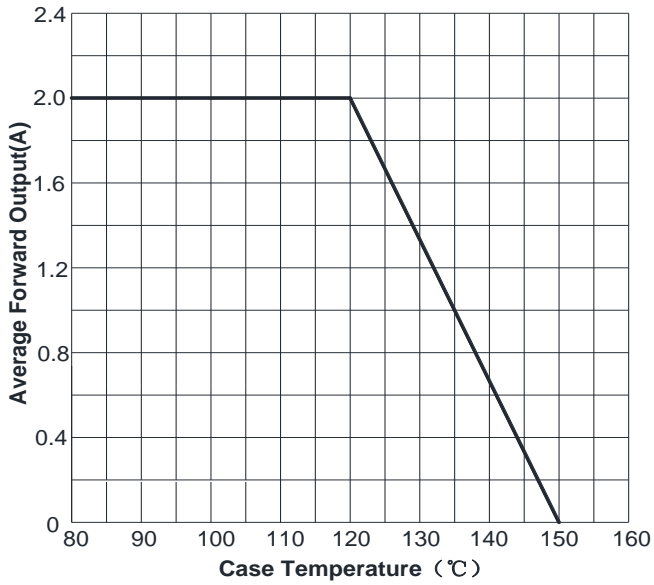


FIG2: Surge Forward Current Capability

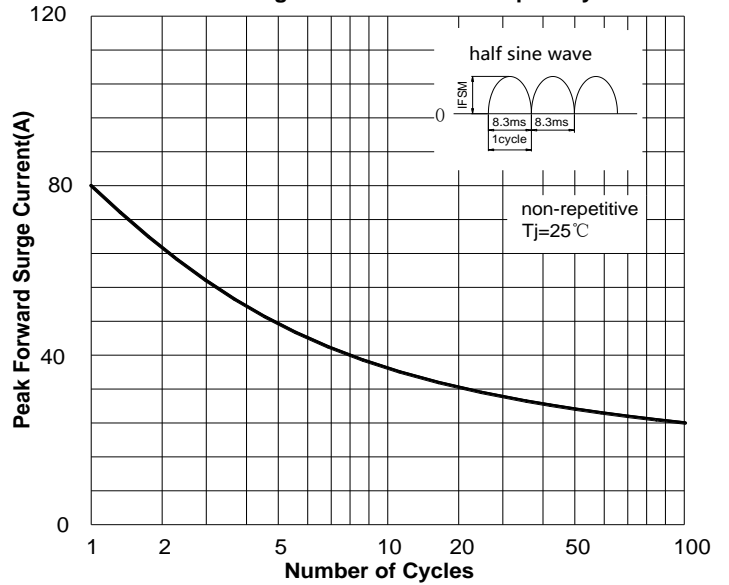


FIG3: Typical Forward Voltage

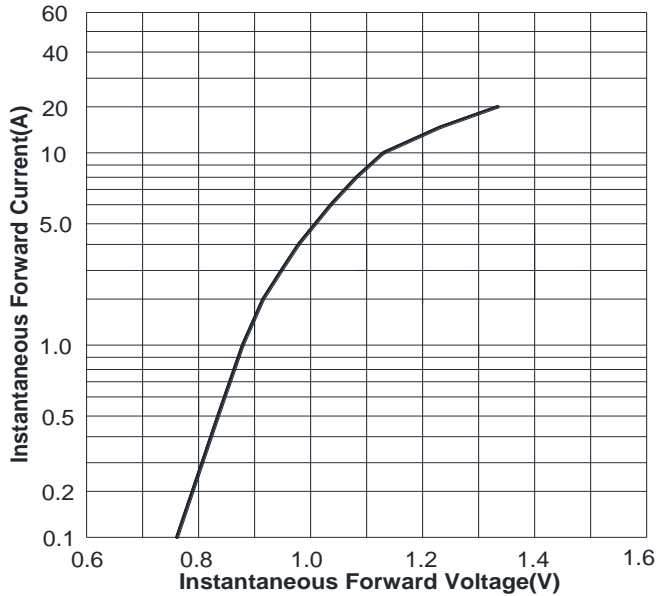
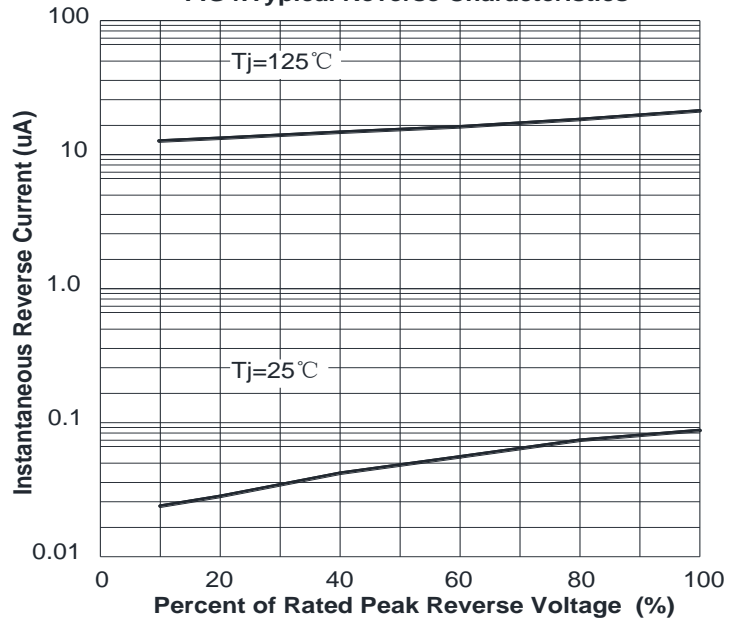


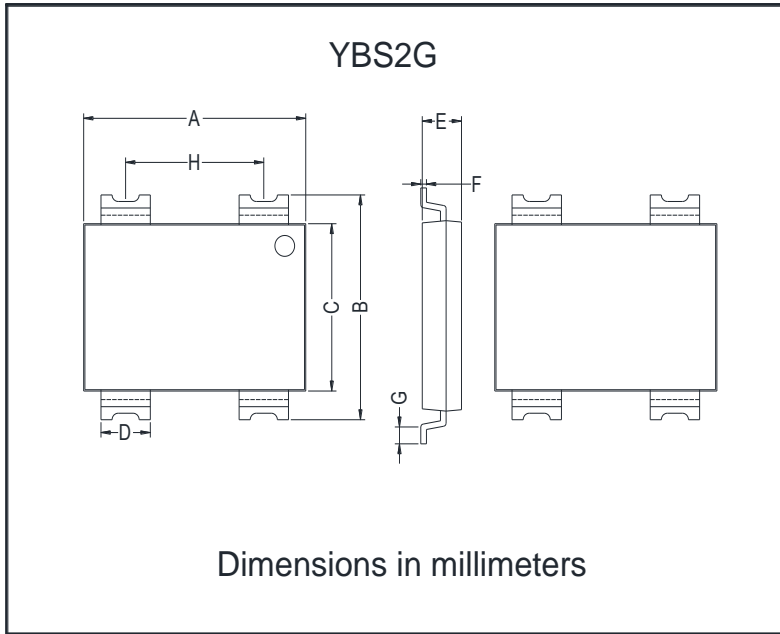
FIG4: Typical Reverse Characteristics





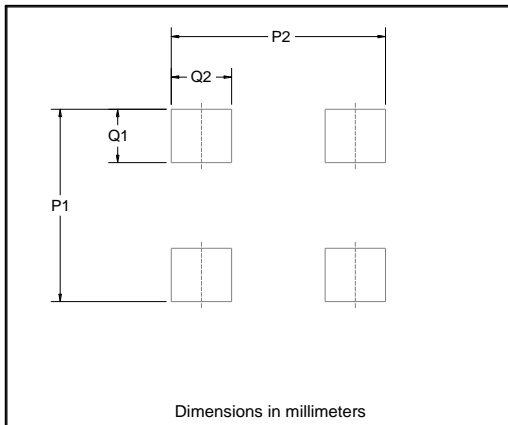
# YBSA20005 THRU YBSA2010

## ■ Outline Dimensions



YBS2G		
Dim	Min	Max
A	8.6	9.2
B	8.3	8.9
C	6.2	6.6
D	1.85	2.15
E	1.35	1.75
F	0.1	0.3
G	0.4	0.8
H	5.4	5.8

## ■ Suggested pad layout



YBS2G	
Dim	Min
P1	11
P2	7.8
Q1	2.4
Q2	2.0



## 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 which 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](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.