

## Bridge Rectifiers

### Features

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

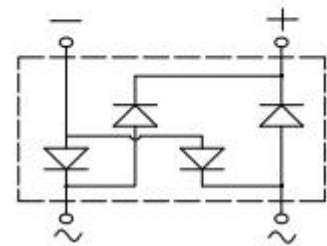


### Typical Applications

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:** YBS  
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 ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	YBS20005	YBS2001	YBS2002	YBS2004	YBS2006	YBS2008	YBS2010
Device marking code			YBS20005	YBS2001	YBS2002	YBS2004	YBS2006	YBS2008	YBS2010
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, $T_c=110^{\circ}\text{C}$	$I_O$	A	2.0						
Surge(non-repetitive)forward current @60HZ sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	IFSM	A	75						
Current squared time @ $1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$ , Rating of per diode	$I^2t$	$\text{A}^2\text{s}$	23						
Storage temperature	Tstg	$^{\circ}\text{C}$	-55 ~+150						
Junction temperature	$T_j$	$^{\circ}\text{C}$	-55 ~+150						

### ■ Electrical Characteristics ( $T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	YBS20005	YBS2001	YBS2002	YBS2004	YBS2006	YBS2008	YBS2010
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =1.0A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	I <sub>RRM</sub>	$\mu\text{A}$	$T_j=25^{\circ}\text{C}$	5						
			$T_j=100^{\circ}\text{C}$	100						

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

PARAMETER		SYMBOL	UNIT	YBS20005	YBS2001	YBS2002	YBS2004	YBS2006	YBS2008	YBS2010
Thermal Resistance	Between Junction and Ambient,	R <sub>θJ-A</sub>	°C/W	55.0						
	Between Junction and Lead	R <sub>θJ-L</sub>		15.0						
	Between Junction and Case	R <sub>θJ-C</sub>		10.0						

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YBS20005-YBS2010	F1	Approximate 0.218	3000	6000	42000	13" reel

■ Characteristics(Typical)

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

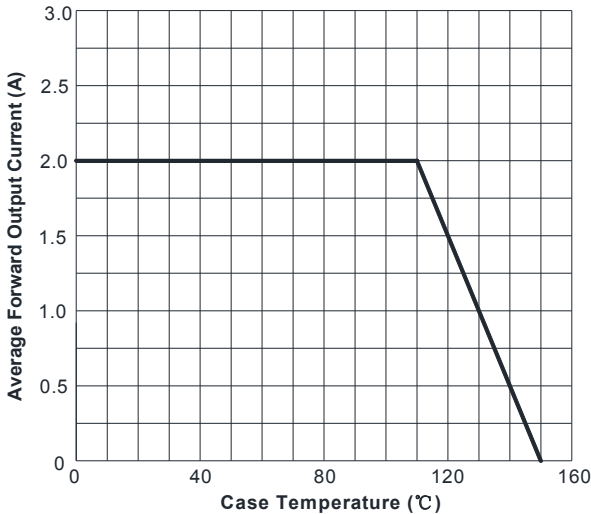


FIG2:Surge Forward Current Capability

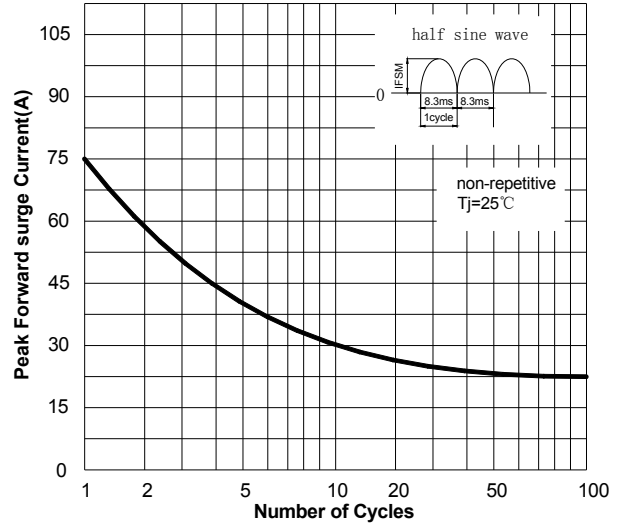


FIG3: Forward Voltage

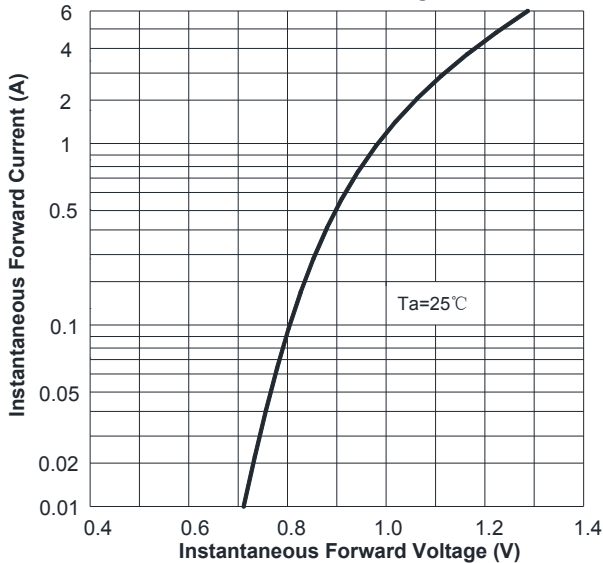
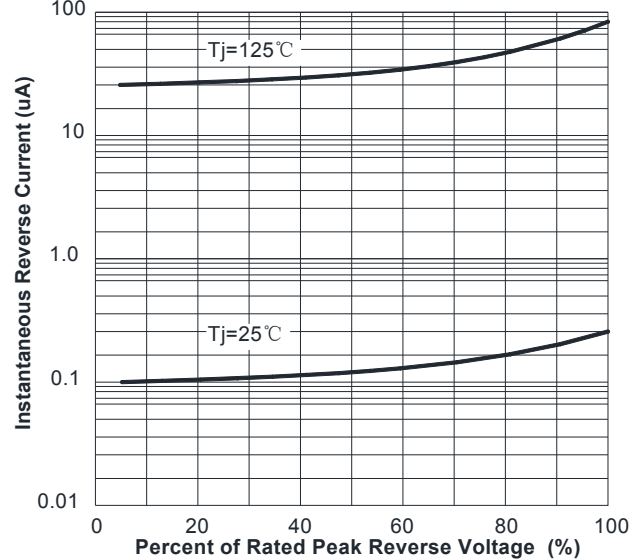
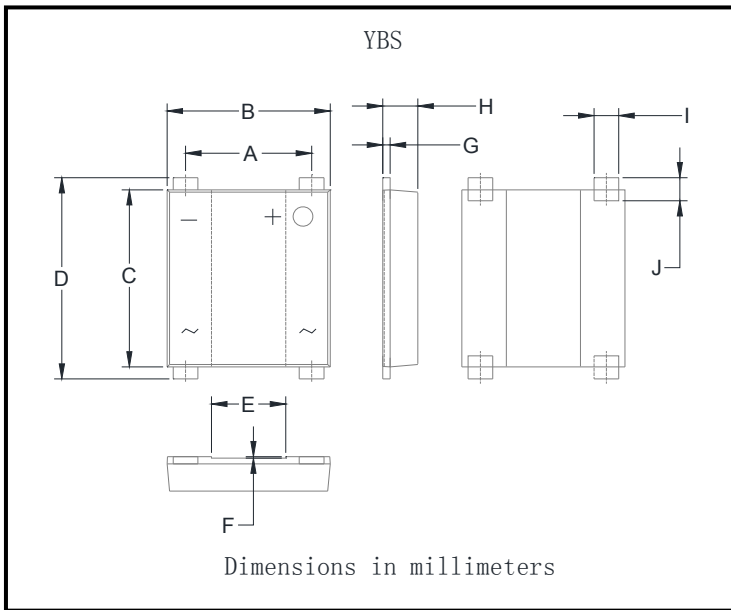


FIG4:Typical Reverse Characteristics

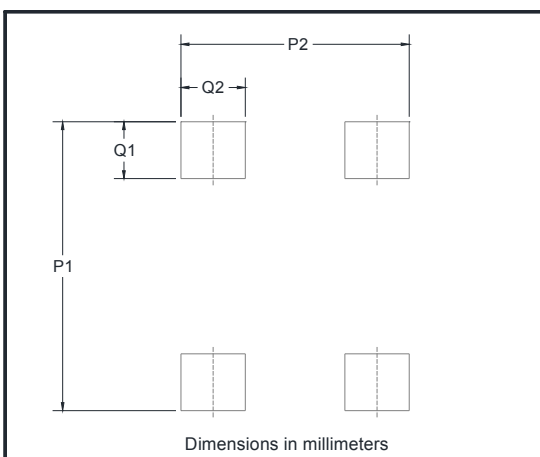


■ Outline Dimensions



YBS		
Dim	Min	Max
A	5.00	5.20
B	6.50	6.70
C	7.20	7.40
D	7.90	8.60
E	2.90	3.10
F	0.04	0.08
G	0.27	0.40
H	1.30	1.50
I	0.95	1.15
J	0.70	1.05

■ Suggested pad layout



Dim	Min
P1	9.15
P2	7.10
Q1	1.80
Q2	2.00

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