

Bridge Rectifiers

Features

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

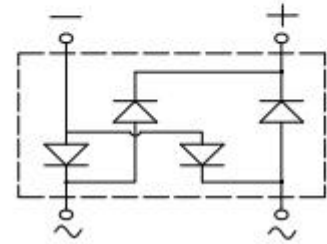
Typical Applications

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:** YBS4
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
- **Soldering Method :** Recommend IR reflow, No wave soldering



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

PARAMETER	SYMBOL	UNIT	YBSL20005	YBSL2001	YBSL2002	YBSL2004	YBSL2006	YBSL2008	YBSL2010
Device marking code			YBSL20005	YBSL2001	YBSL2002	YBSL2004	YBSL2006	YBSL2008	YBSL2010
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°C	I _O	A	2.0						
Surge(non-repetitive)forward current @60HZ sine wave, 1 cycle, T _j =25°C	I _{FSM}	A	75						
Current squared time @1ms≤t<8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	23						
Storage temperature	T _{stg}	°C	-55 ~+150						
Junction temperature	T _j	°C	-55 ~+150						

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	YBSL20005	YBSL2001	YBSL2002	YBSL2004	YBSL2006	YBSL2008	YBSL2010
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =1.0A	1.0						
			I _{FM} =2.0A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	I _{RRM}	μA	T _j =25°C	5						
			T _j =125°C	500						

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

PARAMETER		SYMBOL	UNIT	YBSL20005	YBSL2001	YBSL2002	YBSL2004	YBSL2006	YBSL2008	YBSL2010
Thermal Resistance	Between Junction and Ambient,	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	32						
	Between Junction and Lead	$R_{\theta J-L}$		18						
	Between Junction and Case	$R_{\theta J-C}$		15						

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YBSL20005-YBSL2010	F1	Approximate 0.40	2500	5000	35000	13" reel

Characteristics(Typical)

FIG1:Io-Tc Curve

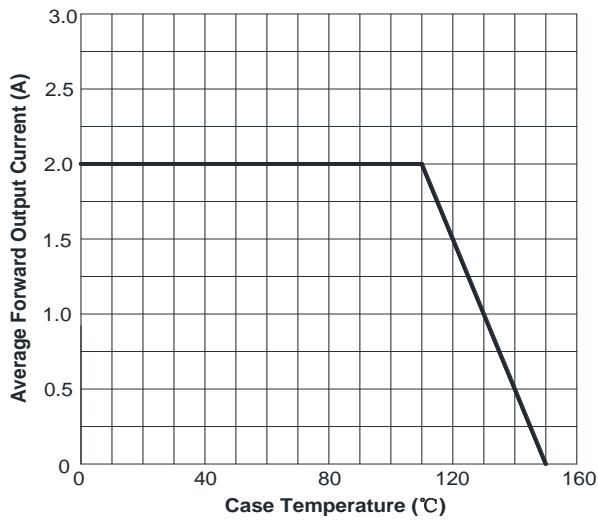


FIG2:Surge Forward Current Capability

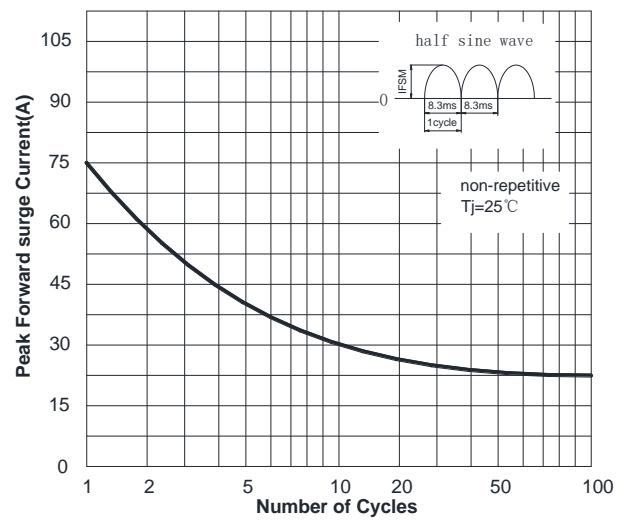


FIG3: Forward Voltage

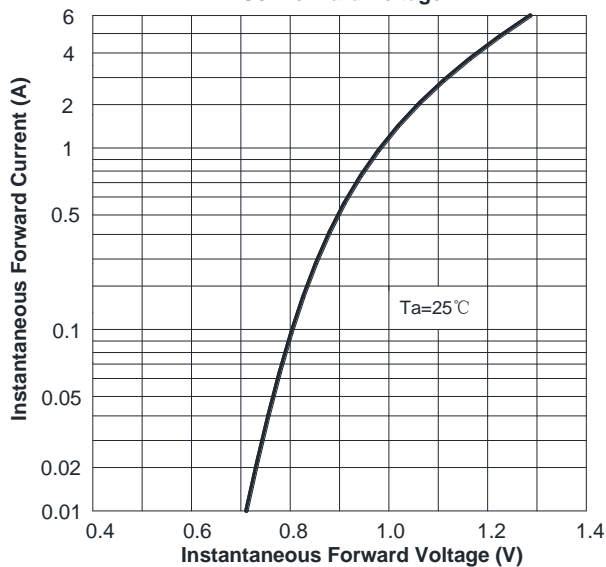
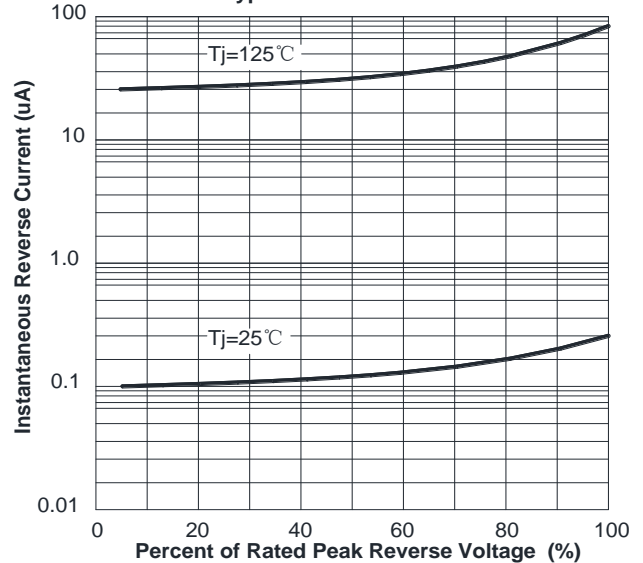
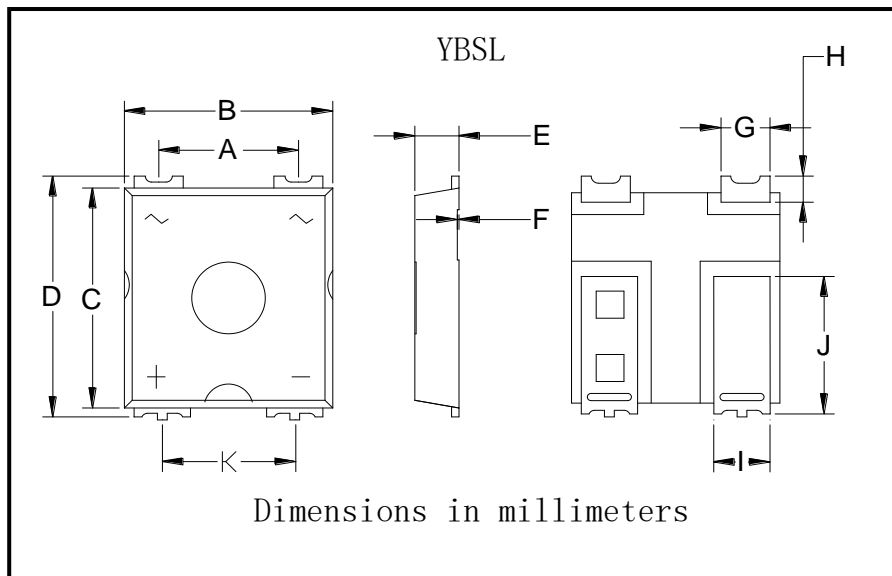


FIG4:Typical Reverse Characteristics

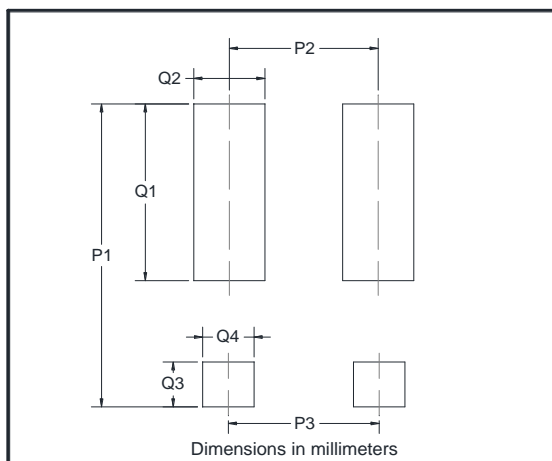


■ Outline Dimensions



YBS4		
Dim	Min	Max
A	5.60	5.80
B	8.30	8.70
C	9.00	9.40
D	10.15	10.55
E	1.70	1.90
F	0.02	0.12
G	1.90	2.10
H	0.20	1.00
I	2.20	2.40
J	5.80	6.20
K	5.30	5.50

■ Suggested pad layout



YBS4	
Dim	Min
P1	10.80
P2	5.40
P3	5.70
Q1	6.30
Q2	2.50
Q3	1.60
Q4	1.80

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