

# **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**: YBS3 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	YBSM80005	YBSM8001	YBSM8002	YBSM8004	YBSM8006	YBSM8008	YBSM8010	
Device marking code			YBSM80005	YBSM8001	YBSM8002	YBSM8004	YBSM8006	YBSM8008	YBSM8010	
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=102°C	IO	А				8.0				
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C			200							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C	IFSM	A	400							
Current squared time @1ms≤t≤8.3ms Tj=25℃,Rating of per diode	l²t	A²s	166							
Storage temperature	T <sub>stg</sub>	°C	-55 ~ +150							
Junction temperature	Tj	°C	-55 ~ +150							

## **Electrical Characteristics** ( $T_a=25$ °C Unless otherwise specified)

PARAMETER	YMBO	υνιτ	TEST CONDITIONS	YBSM80005	YBSM8001	YBSM8002	YBSM8004	YBSM8006	YBSM8008	YBSM8010
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=4.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage	IR	μA	Tj =25℃				5			
per diode	11	μA	Tj =125℃	100						
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	50						



## YBSM80005 THRU YBSM8010

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

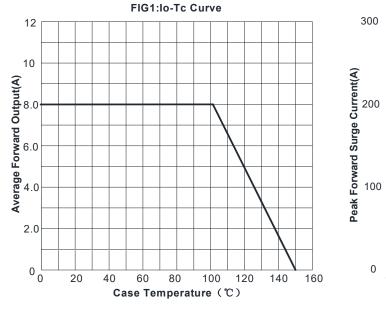
P/	RAMETER	SYMBOL	UNIT	YBSM80005	YBSM8001	YBSM8002	YBSM8004	YBSM8006	YBSM8008	YBSM8010
	Between Junction and Ambient	$R_{\theta J-A}$		55						
Ihermal	Between Junction and Lead	$R_{\theta J-L}$	°C/W	10						
	Between Junction and Case	$R_{ extsf{ heta}J\text{-}C}$		3						

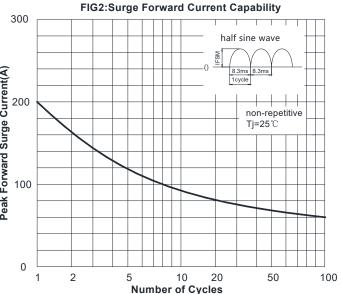
Note: Device mounted on P.C.B with 35mm\*25mm\*1.7mm.

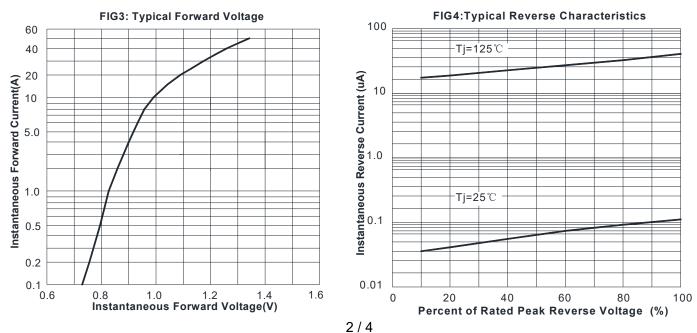
### Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YBSM80005 THRU YBSM8010	F1	Approximate 0.38	1800	3600	25200	13" Reel

## Characteristics (Typical)



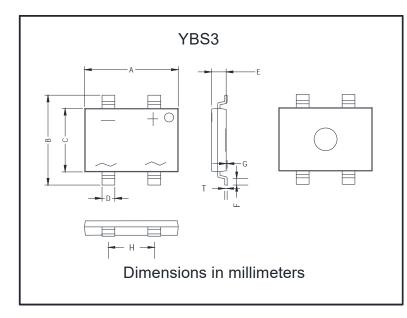




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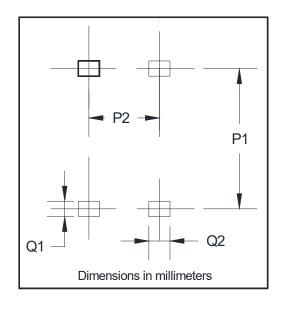


## Outline Dimensions



YBS3					
Dim	Min	Max			
А	10.00	10.40			
В	9.70	10.10			
С	6.80	7.20			
D	1.3	1.5			
E	1.4	1.8			
F	0.5	1.1			
G	0	0.15			
Н	4.9	5.1			
Т	0.20	0.30			

## Suggested pad layout



YBS3			
Dim	Min		
P1	9.25		
P2	5.00		
Q1	1.00		
Q2	1.5		

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## YBSM80005 THRU YBSM8010

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