

# **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: 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	YBSM60005	YBSM6001	YBSM6002	YBSM6004	YBSM6006	YBSM6008	YBSM6010
Device marking code			YBSM60005	YBSM6001	YBSM6002	YBSM6004	YBSM6006	YBSM6008	YBSM6010
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, Tc=80℃	IO	А	6.0						
Surge(non-repetitive)forward current @60HZ sine wave, 1 cycle, Tj=25°C	IFSM	А	150						
Current squared time @1ms≤t≤8.3ms Tj=25℃,Rating of per diode	l <sup>2</sup> t	A <sup>2</sup> s	93.4						
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction temperature	Tj	°C	-55 ~+150						

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

PARAMETER	үмво	υνιτ	TEST CONDITIONS	YBSM60005	YBSM6001	YBSM6002	YBSM6004	YBSM6006	YBSM6008	YBSM6010
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=3.0A				1.0			
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	IRRM	μA	Tj <b>=25</b> ℃				5			

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

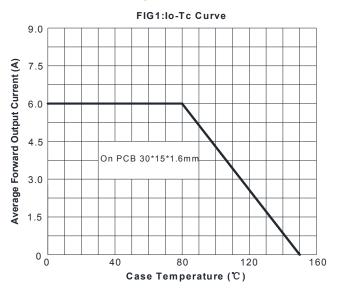
	PARAMETER	SYMBOL	UNIT	YBSM60005	YBSM6001	YBSM6002	YBSM6004	YBSM6006	YBSM6008	YBSM6010	
	Between Junction and Ambient without heatsink	RθJ-A		55 <sup>(1)</sup>							
Thermal Resistance	Between Junction and Lead without heatsink	RθJ-L	°C/W	10 <sup>(1)</sup>							
	Between Junction and Case without heatsink	RθJ-C		5(1)							

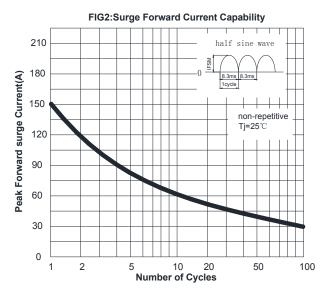
Note:(1)Thermal resistance mounted on P.C.B with 30mm\*15mm.\*1.6mm

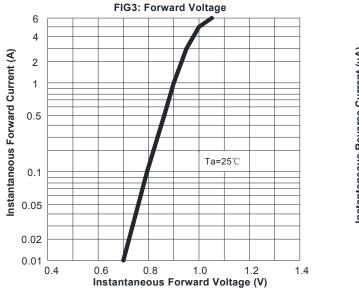
#### Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YBSM60005 THRU YBSM6010	F1	Approximate 0.36	1800	3600	25200	13" Reel

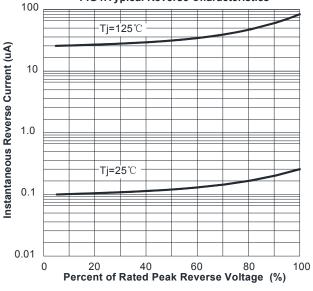
#### Characteristics(Typical)





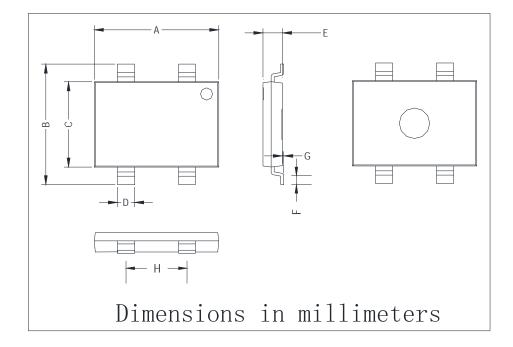






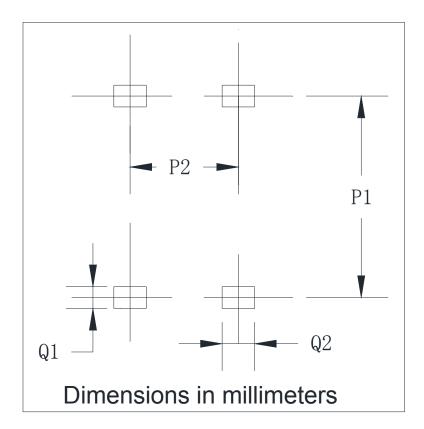


# Outline Dimensions



YBS3					
Dim	Min	Max			
Α	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			

## Suggested pad layout



YBS3			
Dim	Min		
P1	9.25		
P2	5.00		
Q1	1.00		
Q2	1.5		

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