

## Bridge Rectifiers

### Features

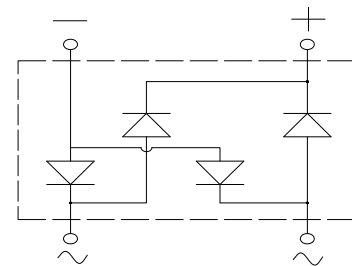
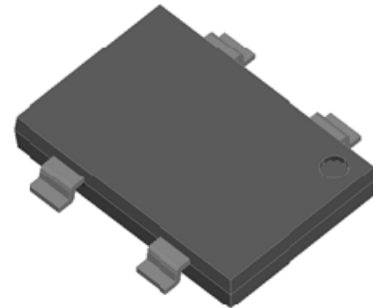
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

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

PARAMETER	SYMBOL	UNIT	YBSM40005	YBSM4001	YBSM4002	YBSM4004	YBSM4006	YBSM4008	YBSM4010
Device marking code			YBSM40005	YBSM4001	YBSM4002	YBSM4004	YBSM4006	YBSM4008	YBSM4010
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, T <sub>c</sub> =100°C	I <sub>O</sub>	A	4.0						
Surge(non-repetitive)forward current @60HZ sine wave, 1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	A	120						
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	60						
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	YBSM40005	YBSM4001	YBSM4002	YBSM4004	YBSM4006	YBSM4008	YBSM4010
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =2.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	T <sub>j</sub> =25°C @ V <sub>RM</sub> =VRRM	5						



# YBSM40005 ~ YBSM4010

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

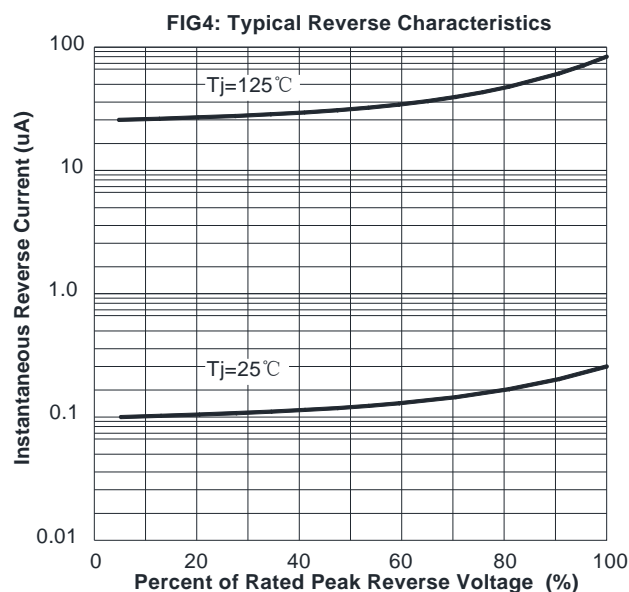
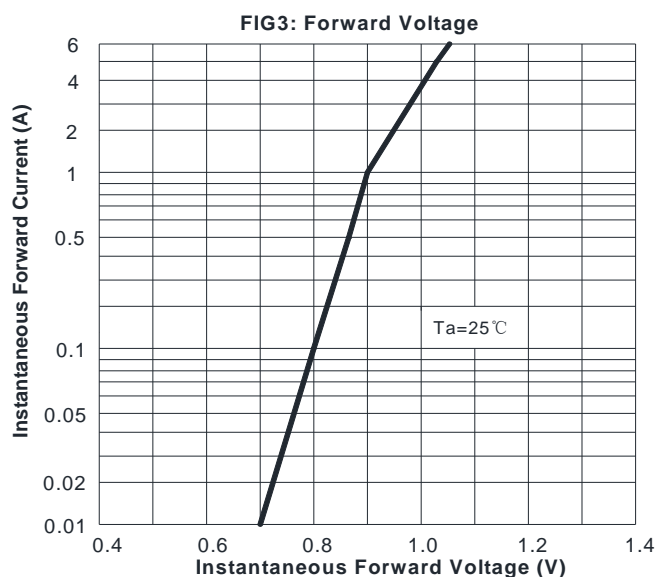
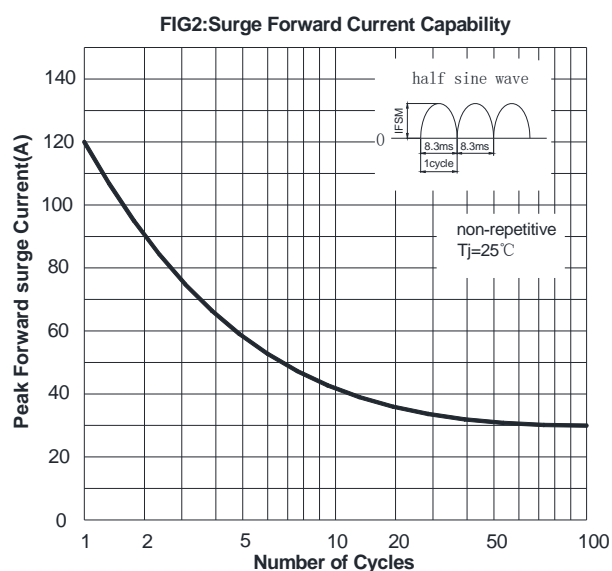
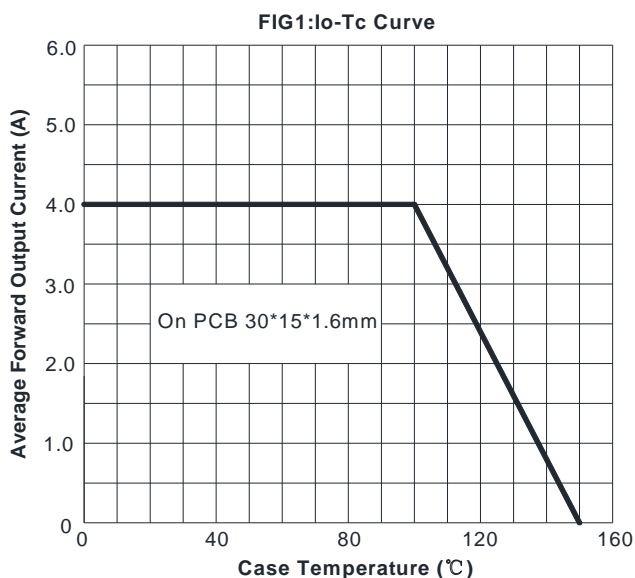
PARAMETER		SYMBOL	UNIT	YBSM40005	YBSM4001	YBSM4002	YBSM4004	YBSM4006	YBSM4008	YBSM4010
Thermal Resistance	Between Junction and Ambient	R <sub>θJ-A</sub>	°C/W	55 <sup>(1)</sup>						
	Between Junction and Lead	R <sub>θJ-L</sub>		10 <sup>(1)</sup>						
	Between Junction and Case	R <sub>θJ-C</sub>		5 <sup>(1)</sup>						

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

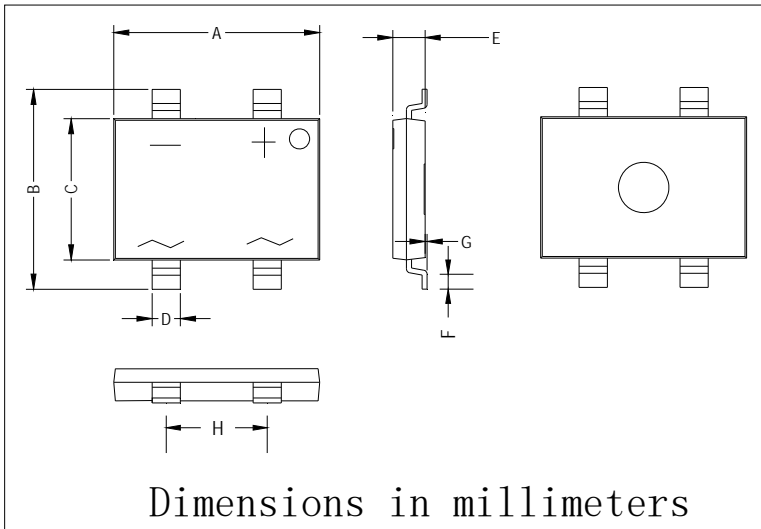
## ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YBSM40005 ~ YBSM4010	F1	Approximate 0.35	1800	3600	25200	13" Reel

## ■ Characteristics (Typical)

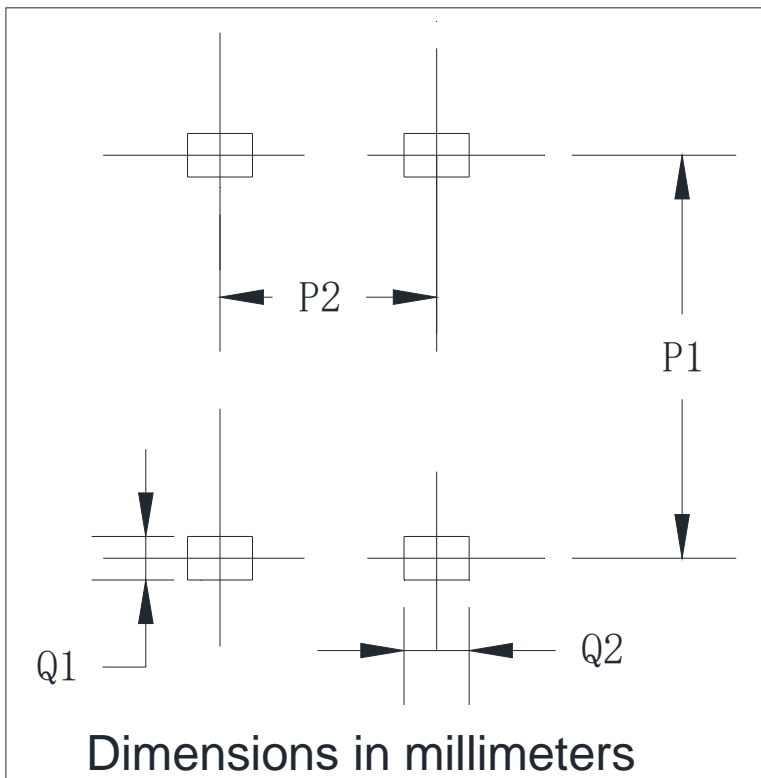


## ■ Outline Dimensions



YBS3		
Dim	Min	Max
A	10.00	10.40
B	9.70	10.10
C	6.80	7.20
D	1.3	1.5
E	1.4	1.8
F	0.5	1.1
G	0	0.15
H	4.9	5.1

## ■ Suggested pad layout



YBS3	
Dim	Min
P1	9.25
P2	5.00
Q1	1.00
Q2	1.5