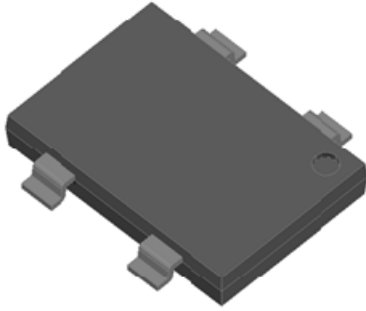


## Bridge Rectifiers

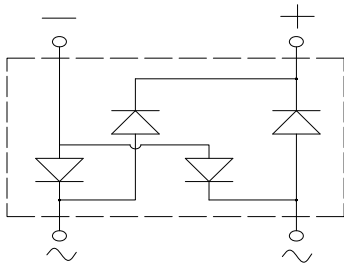


### Features

- 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:** 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	YBSM60005	YBSM6001	YBSM6002	YBSM6004	YBSM6006	YBSM6008	YBSM6010
Device marking code			YBSM60005	YBSM6001	YBSM6002	YBSM6004	YBSM6006	YBSM6008	YBSM6010
Repetitive peak reverse voltage	V <sub>RRM</sub>	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, T <sub>c</sub> =80°C	I <sub>o</sub>	A	6.0						
Surge(non-repetitive)forward current @60Hz sine wave, 1 cycle, T <sub>j</sub> =25°C	I <sub>FSM</sub>	A	150						
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	93.4						
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	YBSM60005	YBSM6001	YBSM6002	YBSM6004	YBSM6006	YBSM6008	YBSM6010
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =3.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode@ V <sub>RM</sub> =V <sub>RRM</sub>	I <sub>RRM</sub>	μA	T <sub>j</sub> =25°C	5						



# YBSM60005 THRU YBSM6010

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

PARAMETER		SYMBOL	UNIT	YBSM60005	YBSM6001	YBSM6002	YBSM6004	YBSM6006	YBSM6008	YBSM6010
Thermal Resistance	Between Junction and Ambient without heatsink	R <sub>θJ-A</sub>	°C/W	55 <sup>(1)</sup>						
	Between Junction and Lead without heatsink	R <sub>θJ-L</sub>		10 <sup>(1)</sup>						
	Between Junction and Case without heatsink	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
YBSM60005 THRU YBSM6010	F1	Approximate 0.36	1800	3600	25200	13" Reel

## ■ Characteristics(Typical)

FIG1:Io-Tc Curve

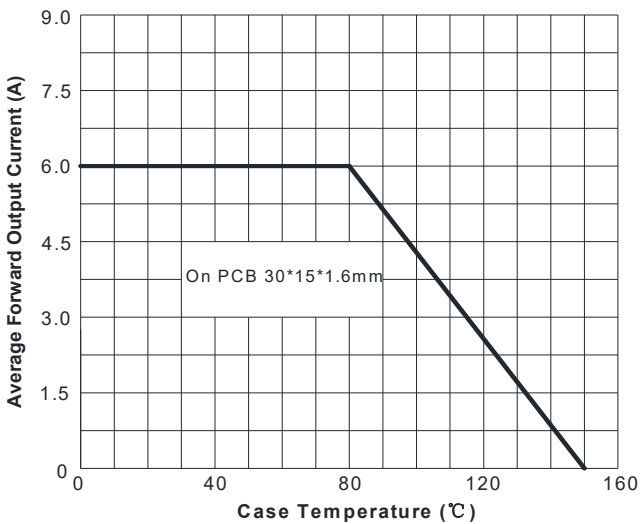


FIG2:Surge Forward Current Capability

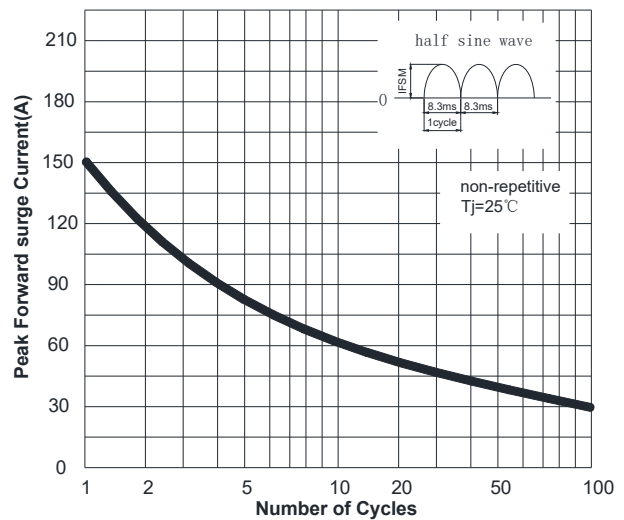


FIG3: Forward Voltage

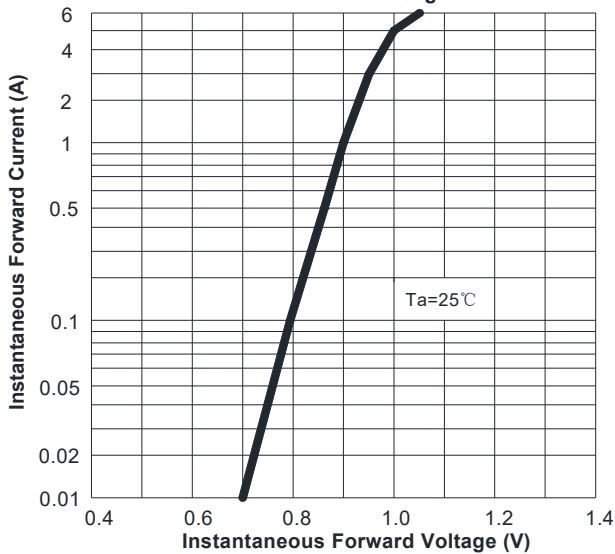
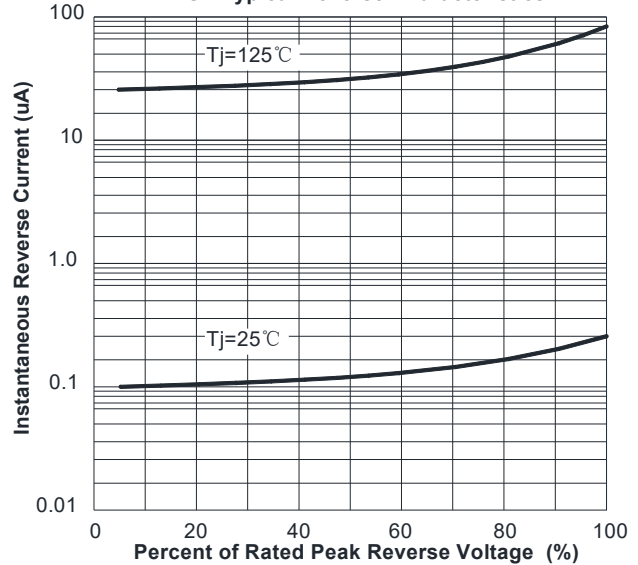


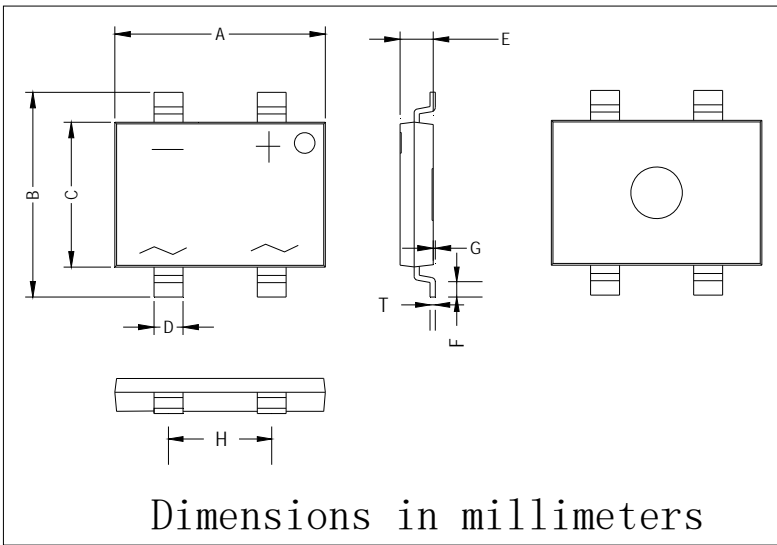
FIG4:Typical Reverse Characteristics





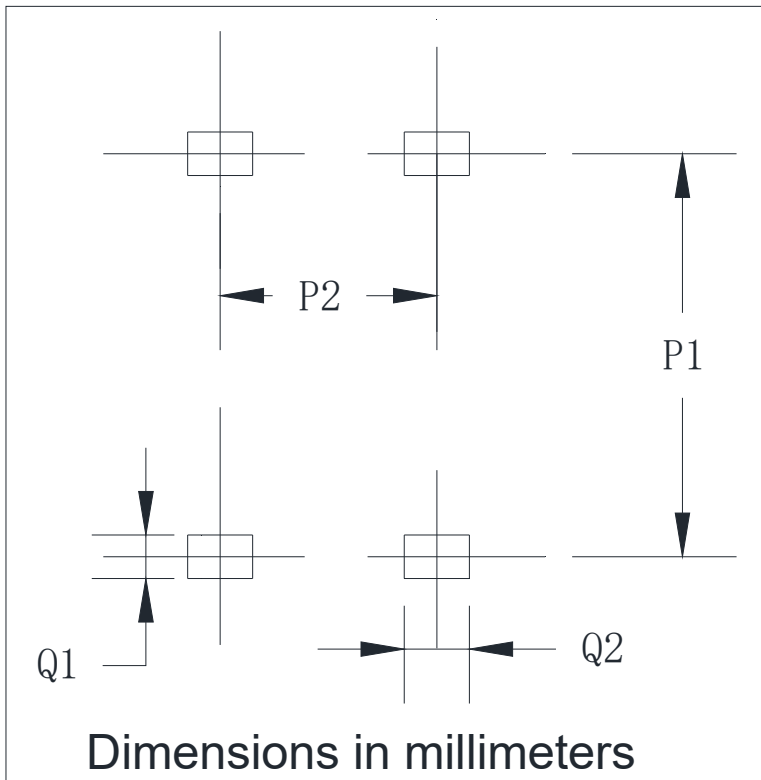
# YBSM60005 THRU YBSM6010

## ■ 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
T	0.20	0.30

## ■ Suggested pad layout



YBS3	
Dim	Min
P1	9.25
P2	5.00
Q1	1.00
Q2	1.5



## YBSM60005 THRU YBSM6010

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