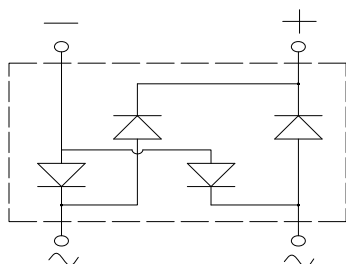


## Bridge Rectifiers



### 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:** YBS6  
Molding compound meets UL 94 V-0 flammability rating, -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	YBSN150005A	YBSN15001A	YBSN15002A	YBSN15004A	YBSN15006A	YBSN15008A	YBSN15010A
Device marking code			YBSN150005A	YBSN15001A	YBSN15002A	YBSN15004A	YBSN15006A	YBSN15008A	YBSN15010A
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=95°C	Io	A	15						
Forward Surge Current (Non-repetitive)@60Hz Half-sine wave, 1 cycle, Tj=25°C	IFSM	A	350						
Forward Surge Current (Non-repetitive)@1ms, square wave, 1 cycle, Tj=25°C			700						
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I²t	A²s	508						
Storage temperature	Tstg	°C	-55 ~ +150						
Junction temperature	Tj	°C	-55 ~ +150						

# YBSN150005A THRU YBSN15010A

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

PARAMETER	YMBO	UNIT	TEST CONDITIONS	YBSN150005A	YBSN15001A	YBSN15002A	YBSN15004A	YBSN15006A	YBSN15008A	YBSN15010A
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =7.5A					1.0		
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>j</sub> =25°C					5		
			T <sub>j</sub> =125°C					100		
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C					110		

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

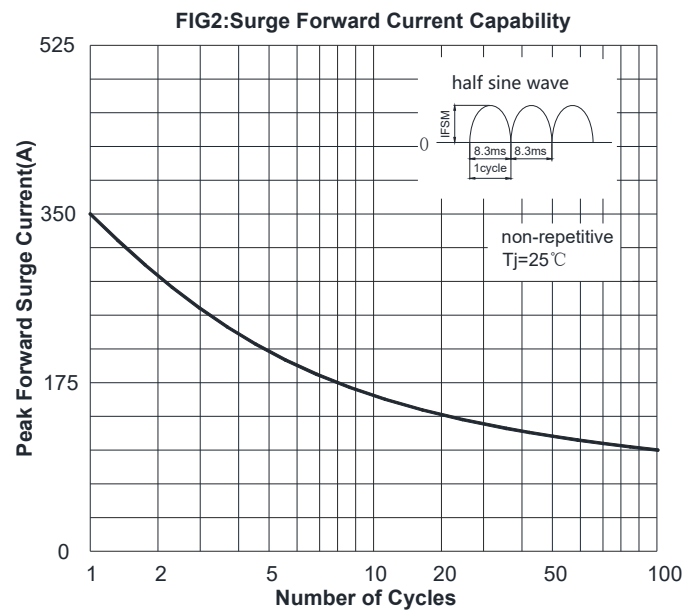
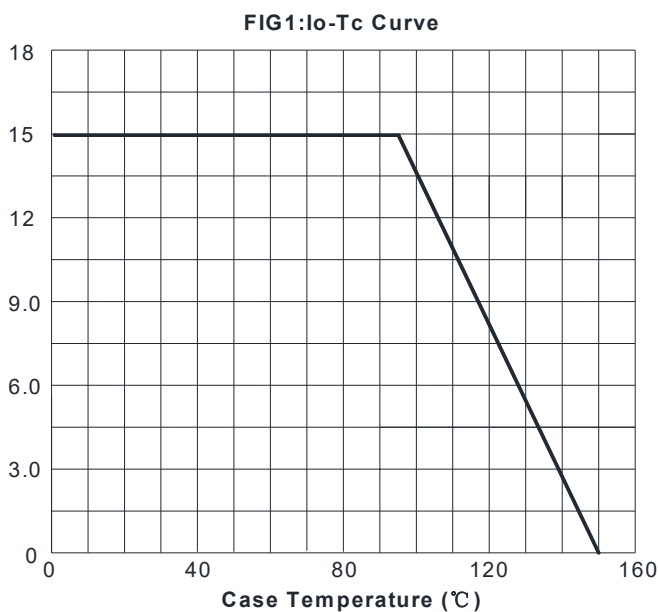
PARAMETER		SYMBOL	UNIT	YBSN150005A	YBSN15001A	YBSN15002A	YBSN15004A	YBSN15006A	YBSN15008A	YBSN15010A
Typical Thermal Resistance	Between Junction and Ambient	R <sub>θJ-A</sub>	°C/W	50						
	Between Junction and Lead	R <sub>θJ-L</sub>		10						
	Between Junction and Case	R <sub>θJ-C</sub>		2						

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

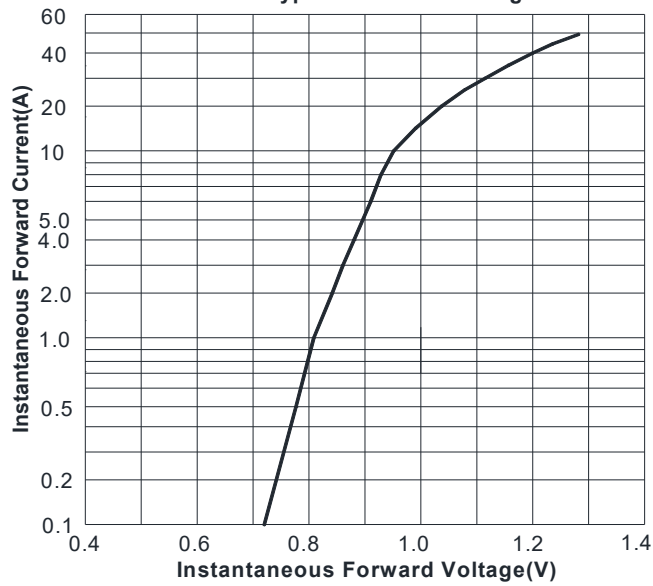
## ■Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YBSN150005A - YBSN15010A	F1	Approximate 0.96	1500	/	21000	13" Reel

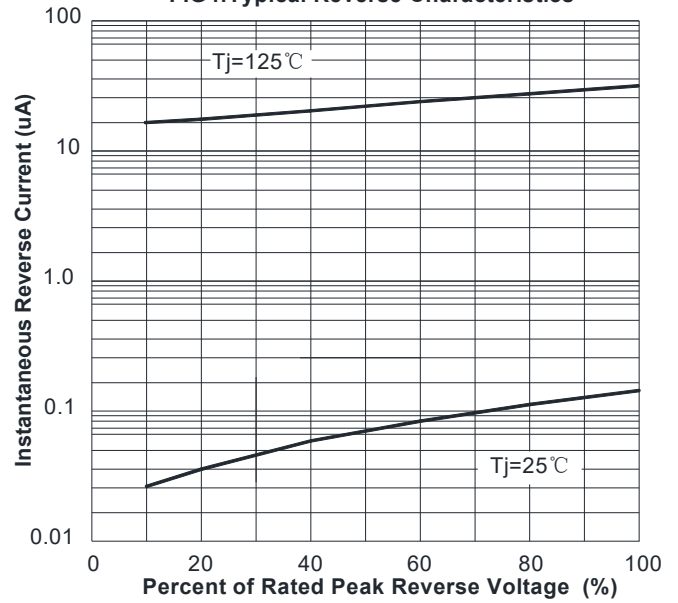
## ■ Characteristics (Typical)



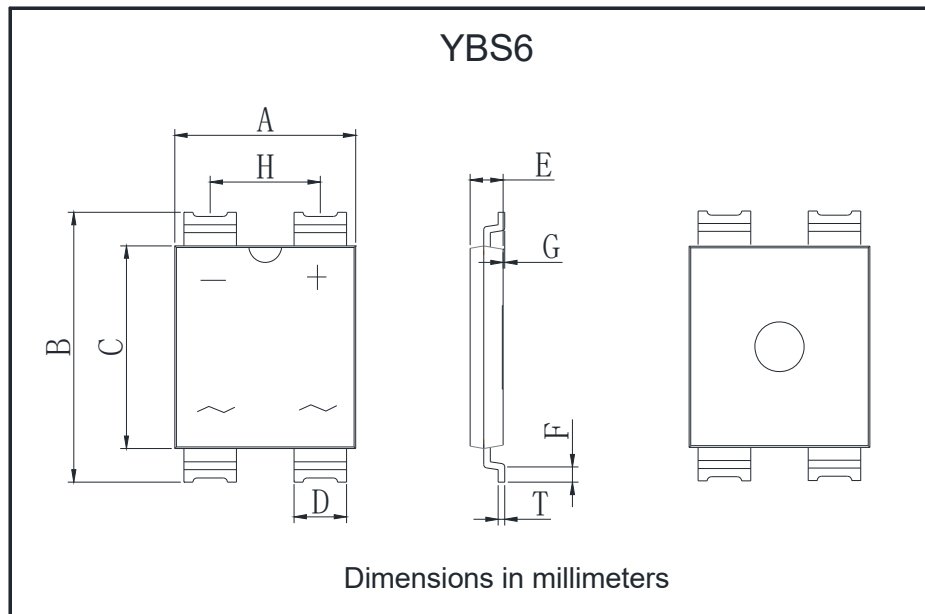
**FIG3: Typical Forward Voltage**



**FIG4: Typical Reverse Characteristics**

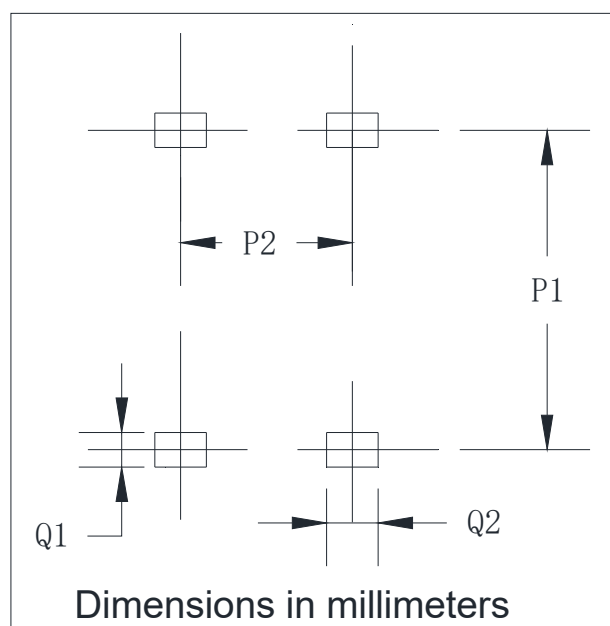


## ■ Outline Dimensions



YBS6		
Dim	Min	Max
A	10.70	11.30
B	15.85	16.65
C	11.70	12.30
D	3.05	3.35
E	1.80	2.20
F	0.70	1.10
G	0	0.20
H	6.55	6.85
T	0.35	0.55

## ■ Suggested pad layout



YBS6	
Dim	Min
P1	15.50
P2	6.70
Q1	1.00
Q2	3.20

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