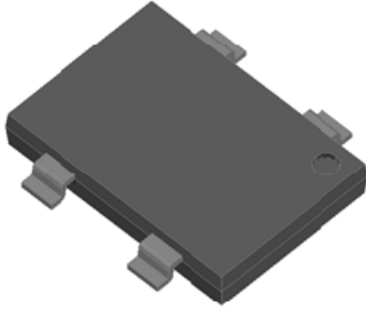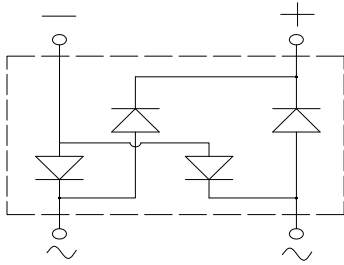**RoHS**
COMPLIANT

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 (Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	YBSM80005	YBSM8001	YBSM8002	YBSM8004	YBSM8006	YBSM8008	YBSM8010
Device marking code			YBSM80005	YBSM8001	YBSM8002	YBSM8004	YBSM8006	YBSM8008	YBSM8010
Repetitive peak reverse voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, Tc=118℃	I_O	A	8.0						
Surge(non-repetitive)forward current @60Hz sine wave, 1 cycle, Tj=25℃	I_{FSM}	A	200						
Current squared time @1ms≤t≤8.3ms Tj=25℃，Rating of per diode	I^2t	A^2s	166						
Storage temperature	T_{stg}	℃	-55 ~+150						
Junction temperature	Tj	℃	-55 ~+150						

■Electrical Characteristics（Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	YBSM80005	YBSM8001	YBSM8002	YBSM8004	YBSM8006	YBSM8008	YBSM8010
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=4.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	Tj=25℃ @V_{RM}=V_{RRM}	5						

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■Thermal Characteristics （Ta=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	YBSM80005	YBSM8001	YBSM8002	YBSM8004	YBSM8006	YBSM8008	YBSM8010
Thermal Resistance	Between Junction and Ambient	$R_{\theta J\text{-}A}$	℃/W	55[1]						
	Between Junction and Lead	$R_{\theta J\text{-}L}$		12[1]						
	Between Junction and Case	$R_{\theta J\text{-}C}$		7[1]						
	Between Junction and Ambient	$R_{\theta J\text{-}A}$		10[2]						
	Between Junction and Lead	$R_{\theta J\text{-}L}$		6[2]						
	Between Junction and Case	$R_{\theta J\text{-}C}$		2[2]						

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

(2)Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on 30mmx15mmx1.6mm AL Pad attached on 160mmX160mmX5mm copper plate

■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)

FIG1:Io-Tc Curve
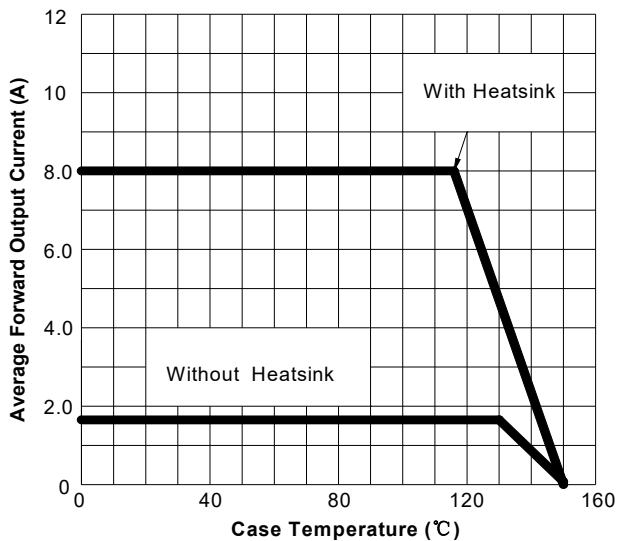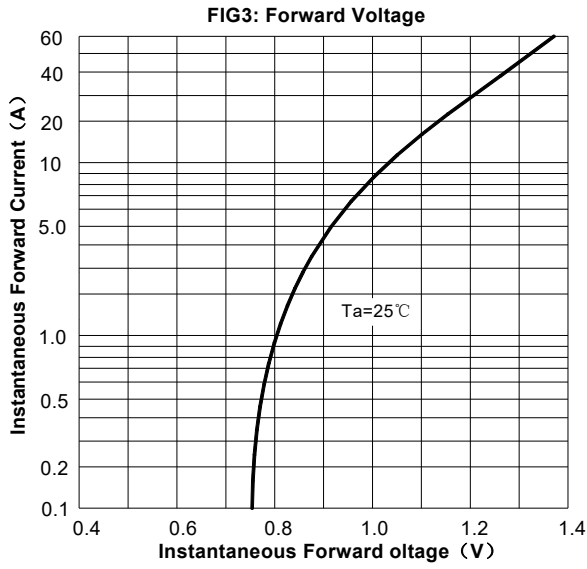

FIG2:Surge Forward Current Capability

FIG3: Forward Voltage

FIG4:Typical Reverse Characteristics
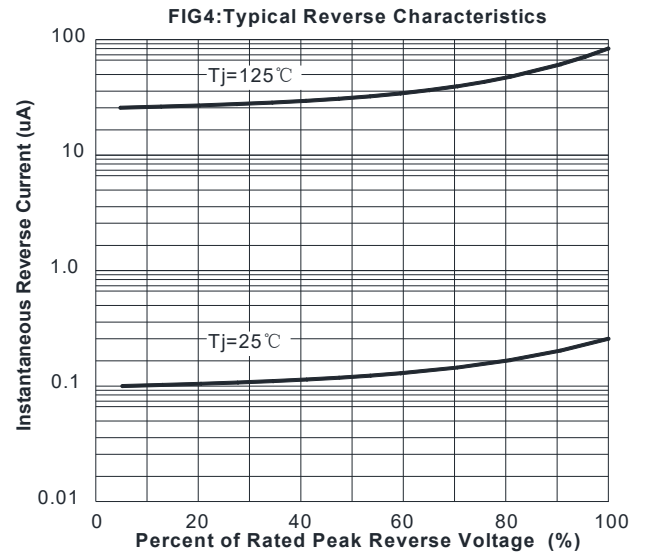
■ **Outline Dimensions**

Dimensions in millimeters
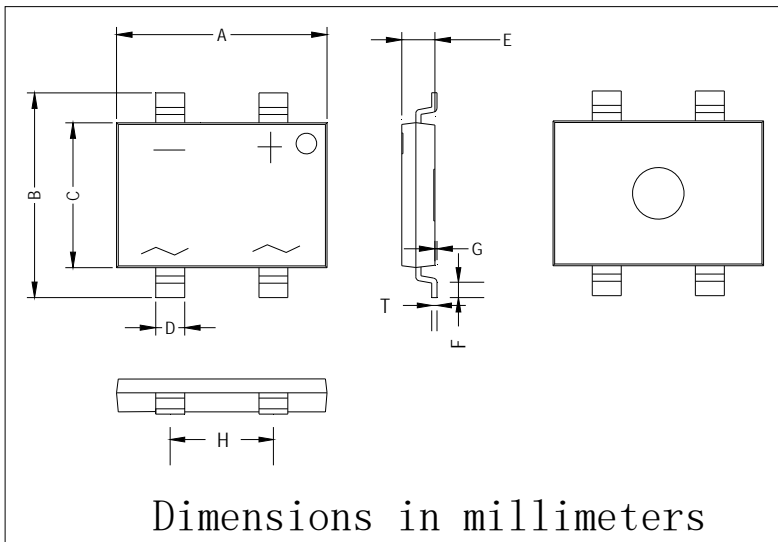
YBS3		
Dim	Min	Max
A	10.00	10.40
B	9.70	10.10
C	6.80	7.20
D	1.3	1.5
E	1.4	1.8
F	0.5	1.1
G	0	0.15
H	4.9	5.1
T	0.20	0.30

■ Suggested pad layout

Dimensions in millimeters
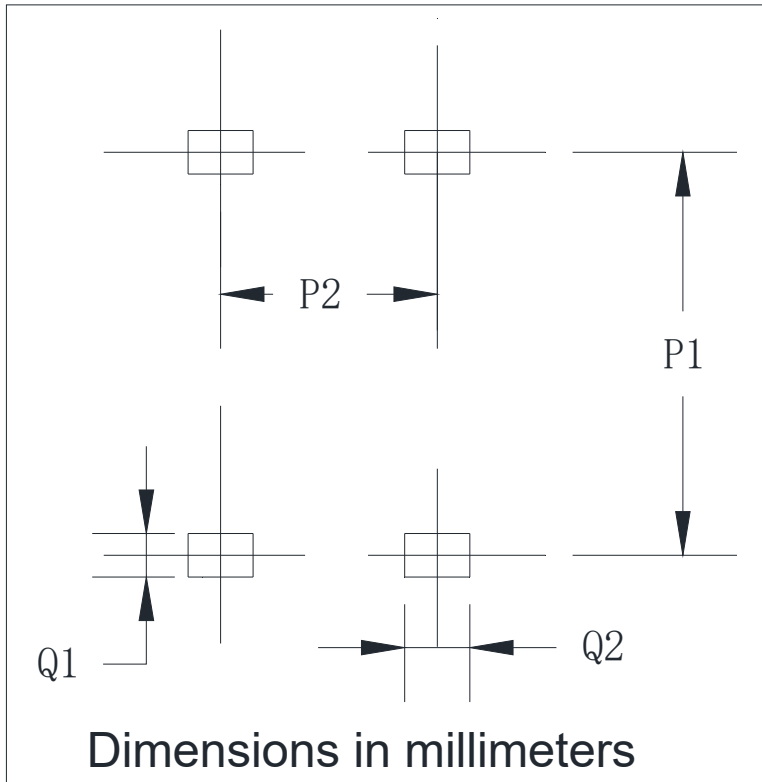
YBS3	
Dim	Min
P1	9.25
P2	5.00
Q1	1.00
Q2	1.5

Disclaimer

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