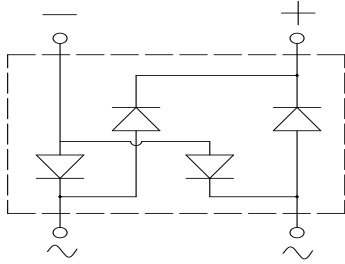
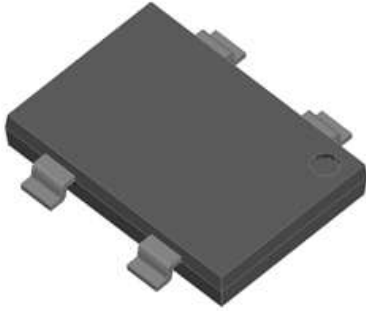


Bridge Rectifiers



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 ($T_a=25^\circ\text{C}$ 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, $T_c=100^\circ\text{C}$	IO	A	4.0						
Surge(non-repetitive)forward current @60HZ sine wave, 1 cycle, $T_j=25^\circ\text{C}$	IFSM	A	120						
Current squared time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A^2s	60						
Storage temperature	T_{stg}	$^\circ\text{C}$	-55 ~+150						
Junction temperature	T_j	$^\circ\text{C}$	-55 ~+150						

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	YBSM40005	YBSM4001	YBSM4002	YBSM4004	YBSM4006	YBSM4008	YBSM4010
Maximum instantaneous forward voltage drop per diode	V _F	V	IFM=2.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	$T_j=25^\circ\text{C}$ @ VRM=VRRM	5						



YBSM40005 THRU YBSM4010

■ Thermal Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	YBSM40005	YBSM4001	YBSM4002	YBSM4004	YBSM4006	YBSM4008	YBSM4010
Thermal Resistance	Between Junction and Ambient	$R_{\theta J-A}$	$^\circ\text{C/W}$	55 ⁽¹⁾						
	Between Junction and Lead	$R_{\theta J-L}$		10 ⁽¹⁾						
	Between Junction and Case	$R_{\theta J-C}$		5 ⁽¹⁾						

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

■ Characteristics (Typical)

FIG1: I_o - T_c Curve

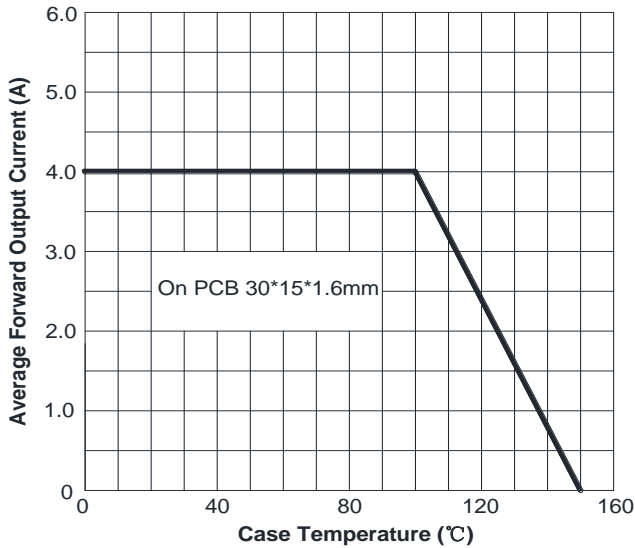


FIG2: Surge Forward Current Capability

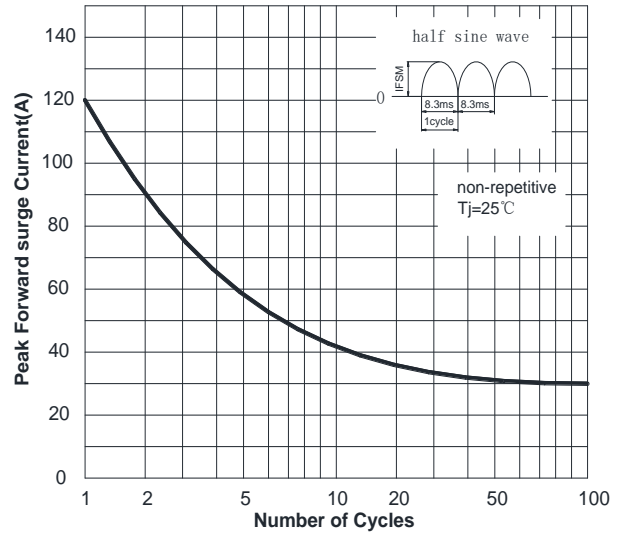


FIG3: Forward Voltage

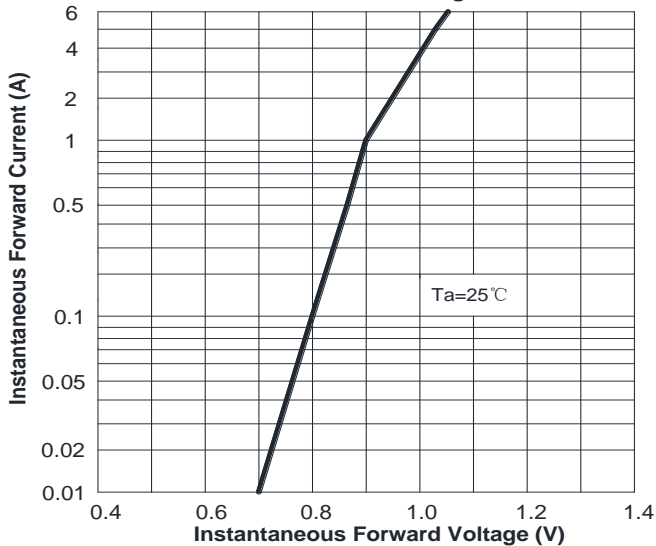
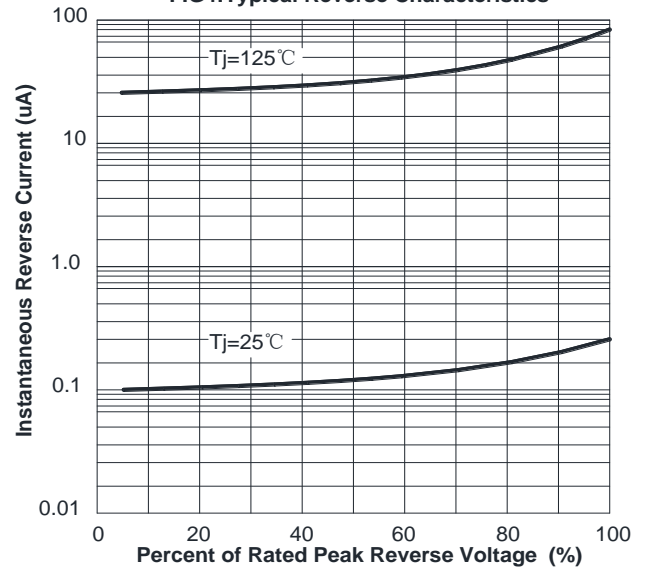


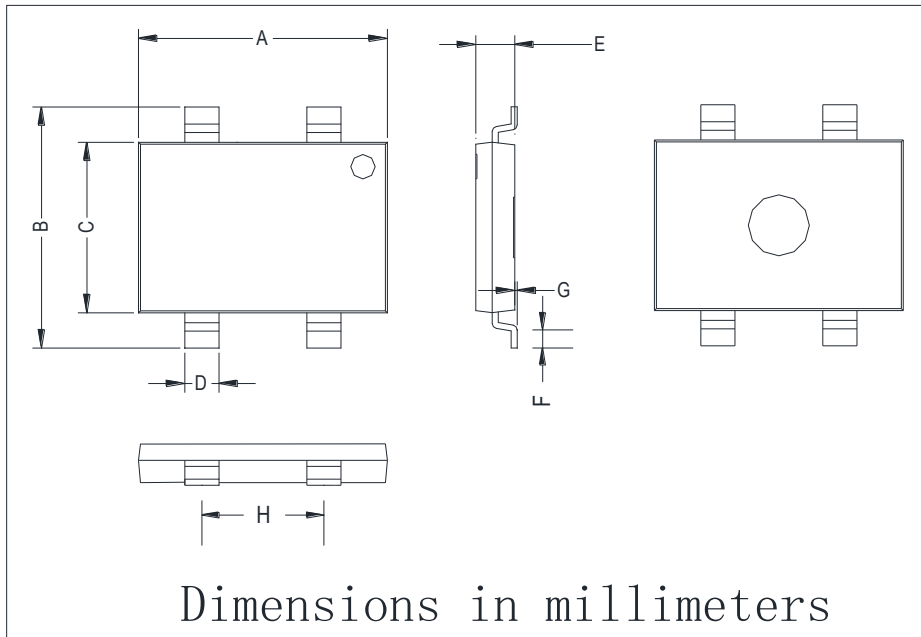
FIG4: Typical Reverse Characteristics





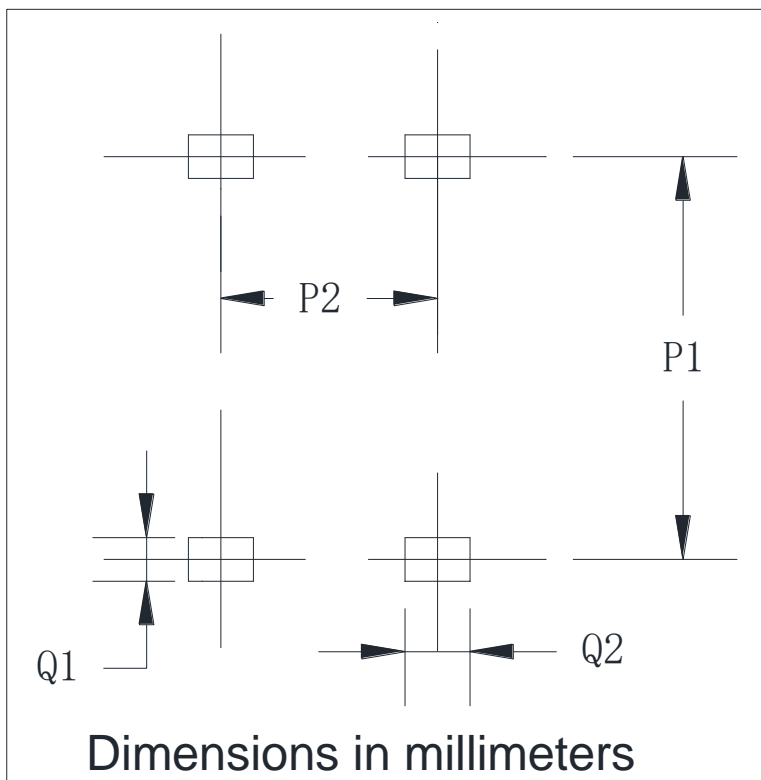
YBSM40005 THRU YBSM4010

■ 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



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