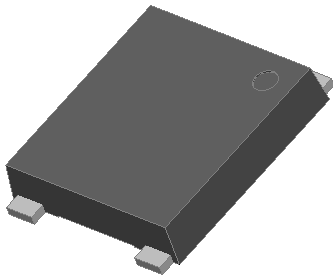


Bridge Rectifiers

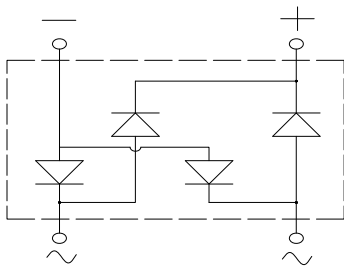


Features

- 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:** YBS
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°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	YBS30005A	YBS3001A	YBS3002A	YBS3004A	YBS3006A	YBS3008A	YBS3010A
Device marking code			YBS30005A	YBS3001A	YBS3002	YBS3004A	YBS3006A	YBS3008A	YBS3010A
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, T _c =110°C	I _O	A	3.0						
Surge(non-repetitive)forward current @60HZ half sine wave, 1 cycle, T _j =25°C	I _{FSM}	A	120						
Current squared time @1ms≤t<8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	59						
Storage temperature	T _{stg}	°C	-55 ~+150						
Junction temperature	T _j	°C	-55 ~+150						

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	YBS30005A	YBS3001A	YBS3002A	YBS3004A	YBS3006A	YBS3008A	YBS3010A
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =1.5A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	I _{RRM}	μA	T _j =25°C	5						
			T _j =100°C	100						



YBS30005A THRU YBS3010A

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	YBS30005A	YBS3001A	YBS3002A	YBS3004A	YBS3006A	YBS3008A	YBS3010A
Thermal Resistance	Between Junction and Ambient,	R _{θJ-A}	°C/W	55.0						
	Between Junction and Lead	R _{θJ-L}		15.0						
	Between Junction and Case	R _{θJ-C}		10.0						

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YBS30005A-YBS3010A	F1	Approximate 0.220	3000	6000	42000	13" reel

■ Characteristics(Typical)

FIG1:I_o-T_c Curve

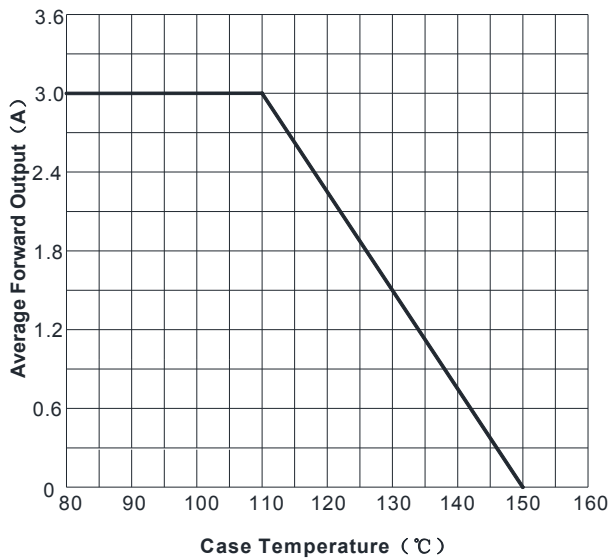


FIG2: Surge Forward Current Capability

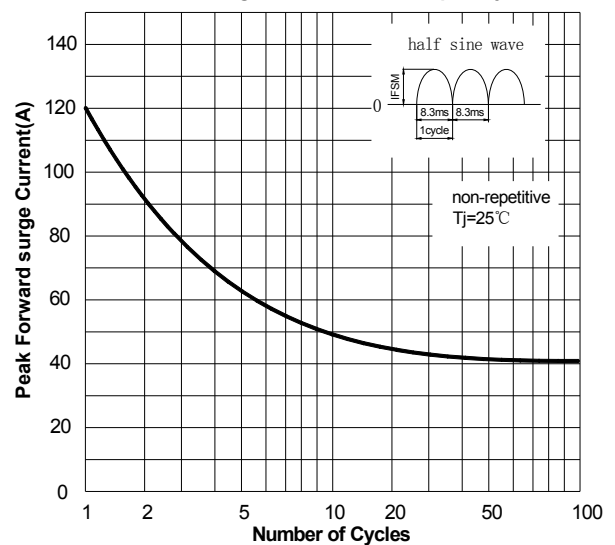


FIG3: Forward Voltage

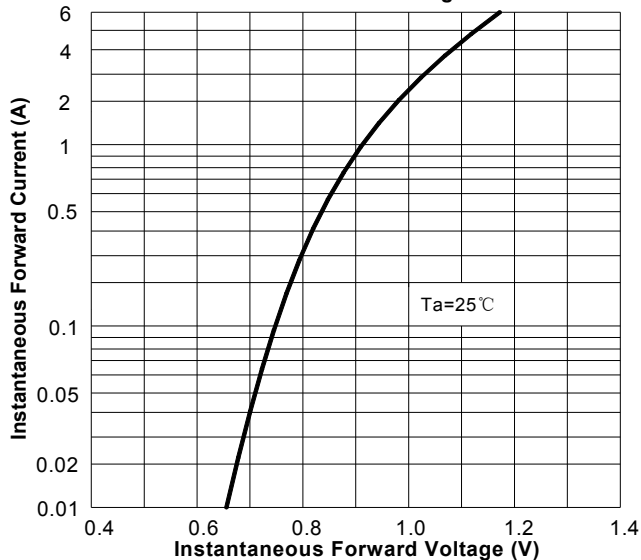
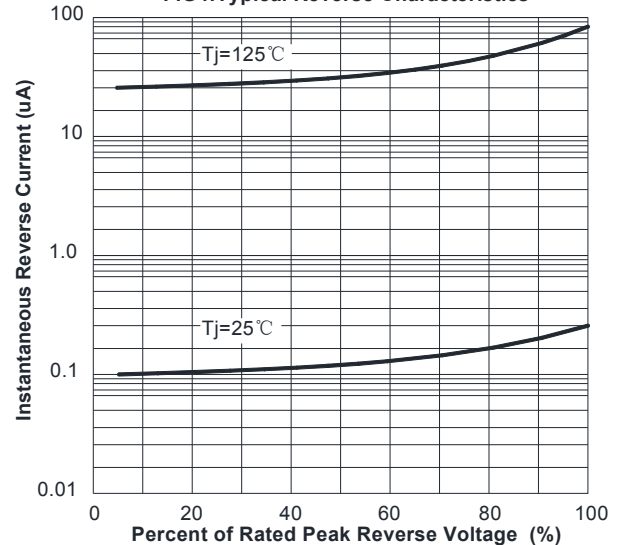


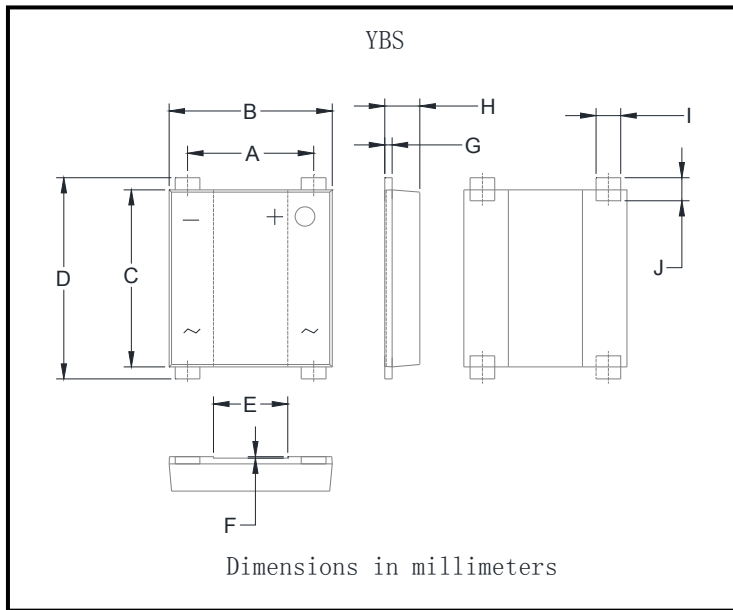
FIG4: Typical Reverse Characteristics





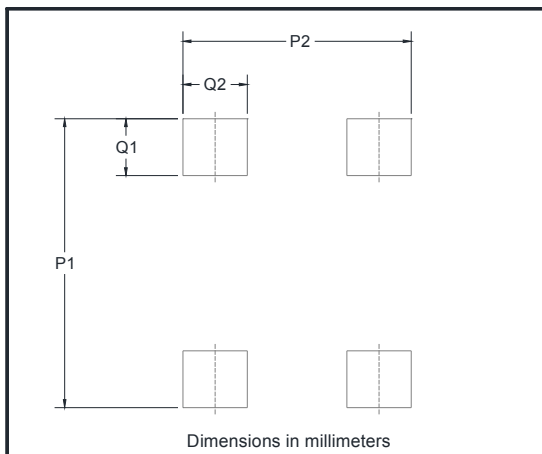
YBS30005A THRU YBS3010A

■ Outline Dimensions



YBS		
Dim	Min	Max
A	5.00	5.20
B	6.50	6.70
C	7.20	7.40
D	7.90	8.60
E	2.90	3.10
F	0.04	0.08
G	0.27	0.40
H	1.30	1.50
I	0.95	1.15
J	0.70	1.05

■ Suggested pad layout



Dim	Min
P1	9.15
P2	7.10
Q1	1.80
Q2	2.00



YBS30005A THRU YBS3010A

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