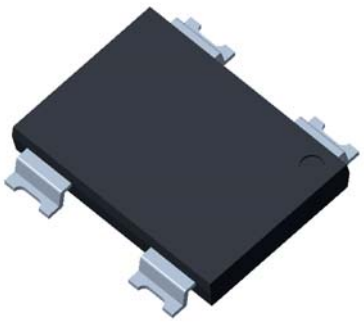
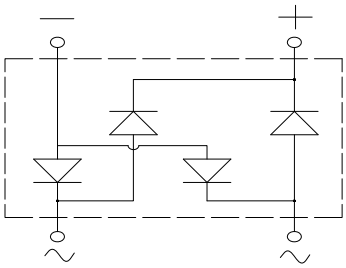
Bridge Rectifiers





Features

- 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**: YBS2G
  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℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	YBSA30005A	YBSA3001A	YBSA3002A	YBSA3004A	YBSA3006A	YBSA3008A	YBSA3010A
Device marking code			YBSA30005A	YBSA3001A	YBSA3002A	YBSA3004A	YBSA3006A	YBSA3008A	YBSA3010A
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, Tc=115℃	I_O	A	3.0						
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	120						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃			240						
Current squared time @1ms≤t≤8.3ms Tj=25℃，Rating of per diode	I^2t	A^2s	59.8						
Storage temperature	T_{stg}	℃	-55 ~ +150						
Junction temperature	T_j	℃	-55 ~ +150						

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

PARAMETER	YMBO	UNIT	TEST CONDITIONS	YBSA30005A	YBSA3001A	YBSA3002A	YBSA3004A	YBSA3006A	YBSA3008A	YBSA3010A
Maximum instantaneous forward voltage drop per diode	VF	V	I_{FM}=1.5A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	T_j=25℃	5						
			Tj=125℃	100						
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	40						

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

PARAMETER		YMBO	UNIT	YBSA30005A	YBSA3001A	YBSA3002A	YBSA3004A	YBSA3006A	YBSA3008A	YBSA3010A
Typical Thermal Resistance	Between Junction and Ambient	$R_{\theta J-A}$	℃/W	55						
	Between Junction and Lead	$R_{\theta J-L}$		11						
	Between Junction and Case	$R_{\theta J-C}$		7						

Note: Device mounted on P.C.B with 35mm*25mm*1.7mm.

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YBSA30005A-YBSA3010A	F1	Approximate 0.274	2500	/	35000	13” reel

■ Characteristics (Typical)

FIG1:Io-Tc Curve

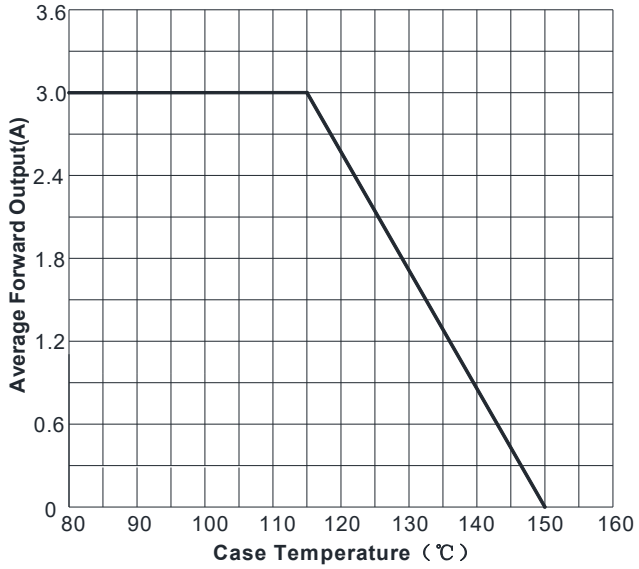


FIG2:Surge Forward Current Capability

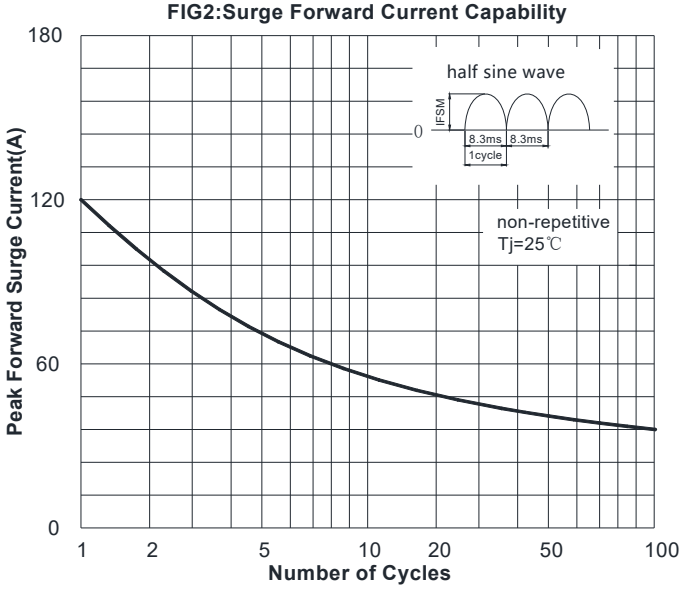


FIG3: Typical Forward Voltage

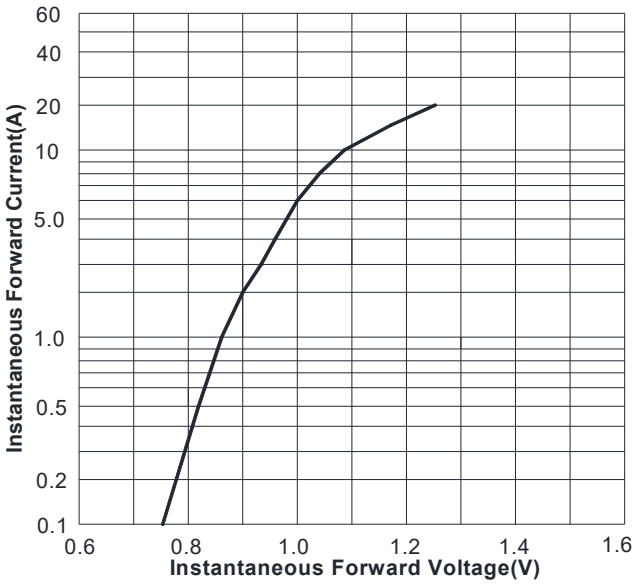
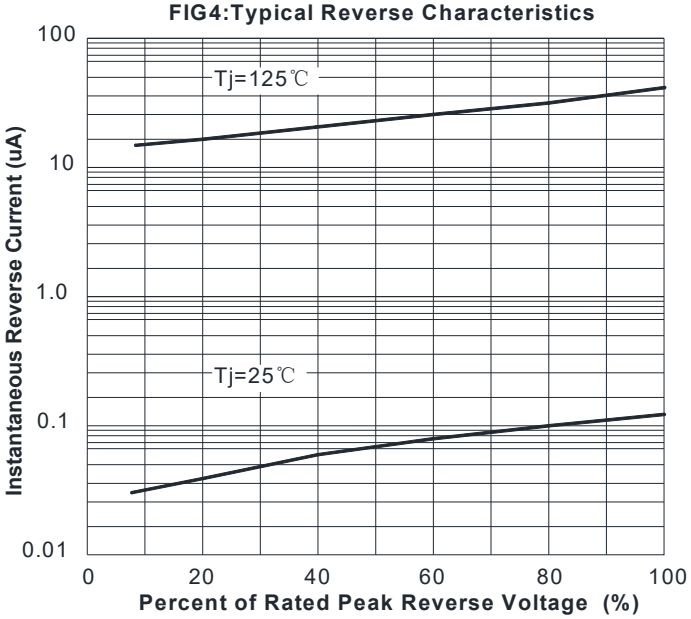
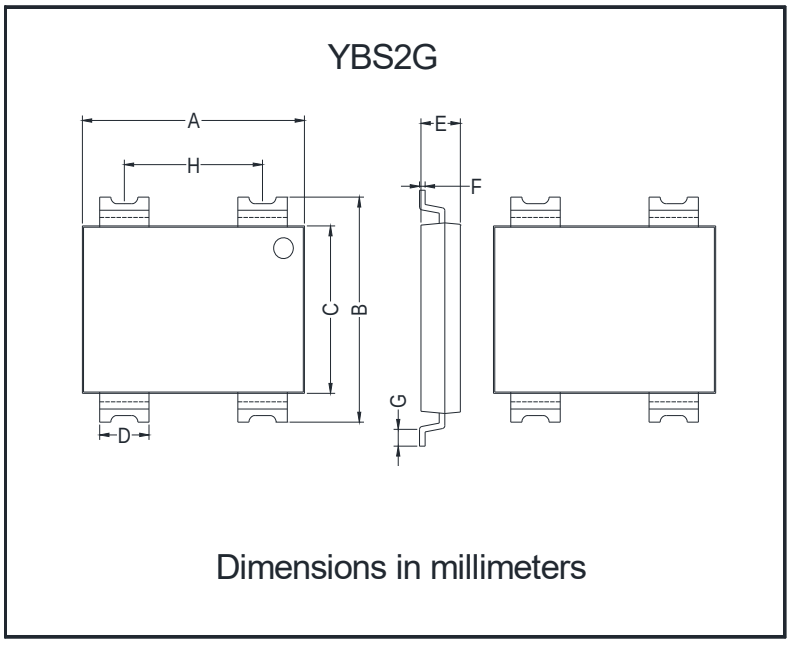


FIG4:Typical Reverse Characteristics

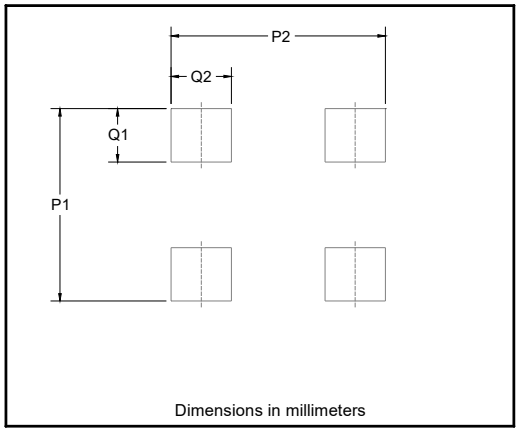


■ Outline Dimensions



YBS2G		
Dim	**Min**	**Max**
A	8.6	9.2
B	8.3	8.9
C	6.2	6.6
D	1.85	2.15
E	1.35	1.75
F	0.1	0.3
G	0.4	0.8
H	5.4	5.8

■ Suggested pad layout



YBS2G	
Dim	**Min**
P1	11
P2	7.8
Q1	2.4
Q2	2.2

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