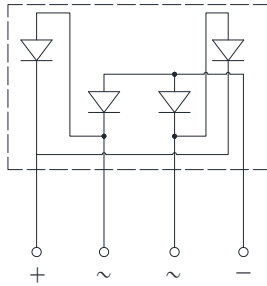
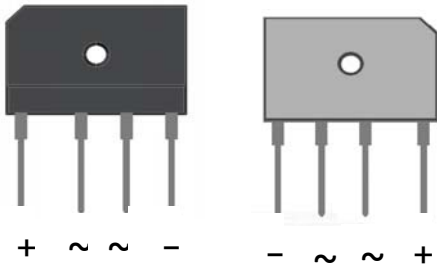


Bridge Rectifiers



Features

- UL recognition, file #E230084
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** PB
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **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	PB50005	PB5001	PB5002	PB5004	PB5006	PB5008	PB5010
Device marking code			PB50005	PB5001	PB5002	PB5004	PB5006	PB5008	PB5010
Repetitive peak reverse voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load,	With heatsink $T_c=84^\circ\text{C}$	I_o	A	50.0 ⁽¹⁾					
	Without heatsink $T_a=25^\circ\text{C}$			4.5					
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, $T_j=25^\circ\text{C}$	I_{FSM}	A	450						
Current squared time @1ms≤t≤8.3ms $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A ² s	840						
Storage temperature	T_{stg}	°C	-55 ~+150						
Junction temperature	T_j	°C	-55 ~+150						
Dielectric strength @ terminals to case, AC 1 minute	V_{dis}	KV	2.5						
Mounting torque @recommend torque: 5kg·cm	T_{or}	kg·cm	8						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	PB50005	PB5001	PB5002	PB5004	PB5006	PB5008	PB5010
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=25.0\text{A}$	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	$V_{RM}=V_{RRM}$	5						



PB50005 THRU PB5010

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

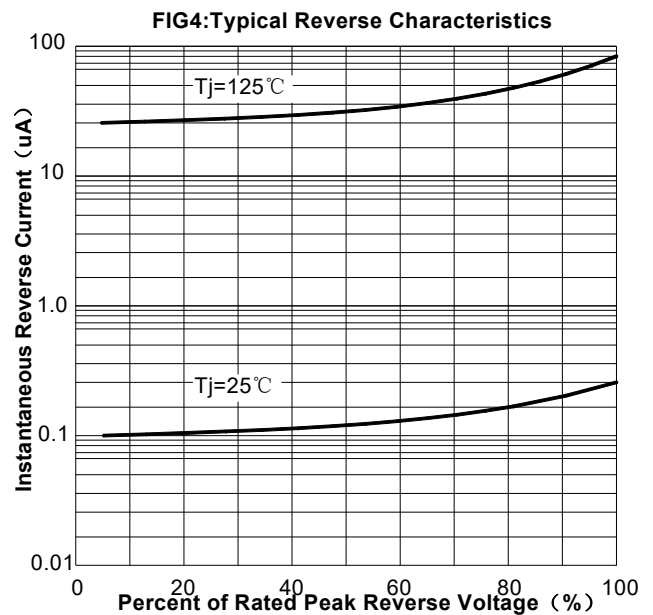
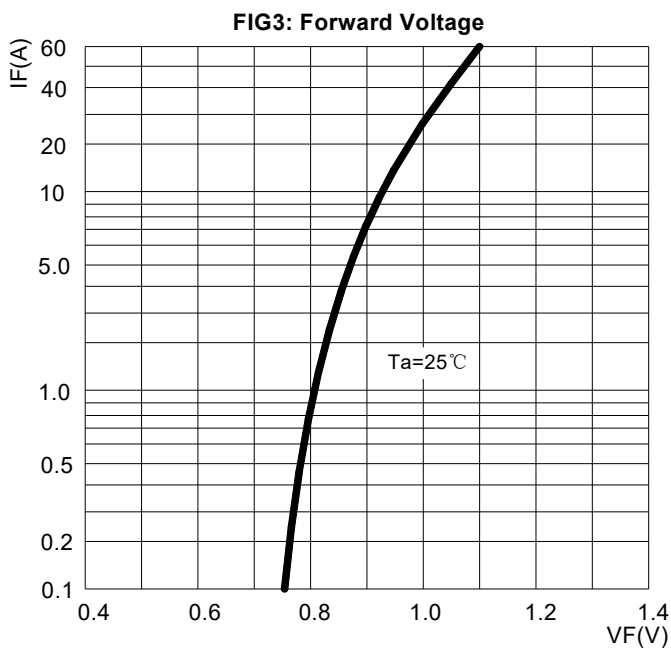
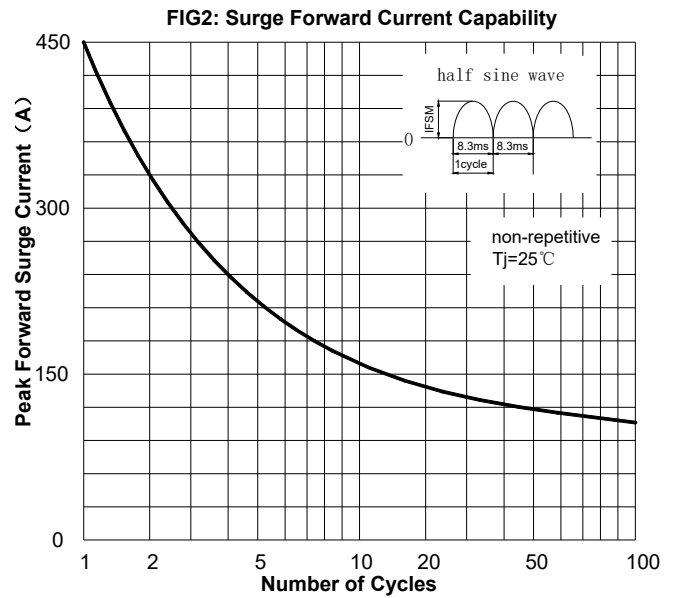
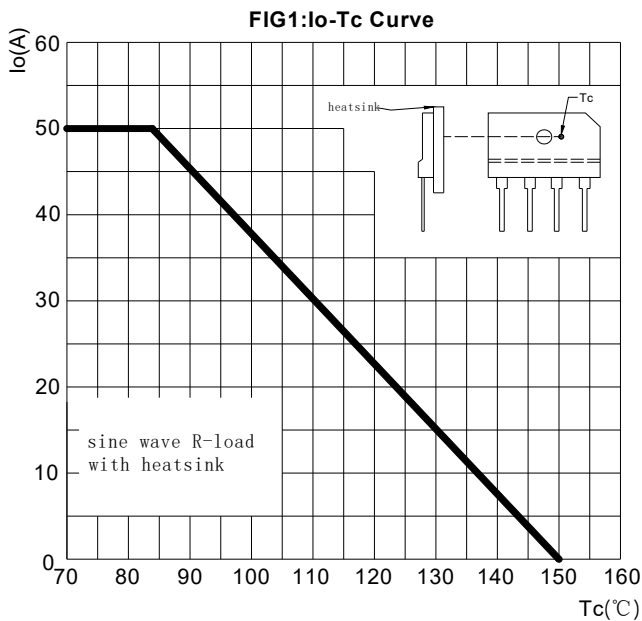
PARAMETER		SYMBOL	UNIT	PB50005	PB5001	PB5002	PB5004	PB5006	PB5008	PB5010
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJA}	°C/W	18.0						
	Between junction and case, With heatsink	R _{θJC}		0.70 ⁽¹⁾						

Note1: Unit Mounted on 100*50*2mm aluminum Plate Heatsink

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
PB50005 THRU PB5010	B1	Approximate 7.5	15	750	1500	TUBE

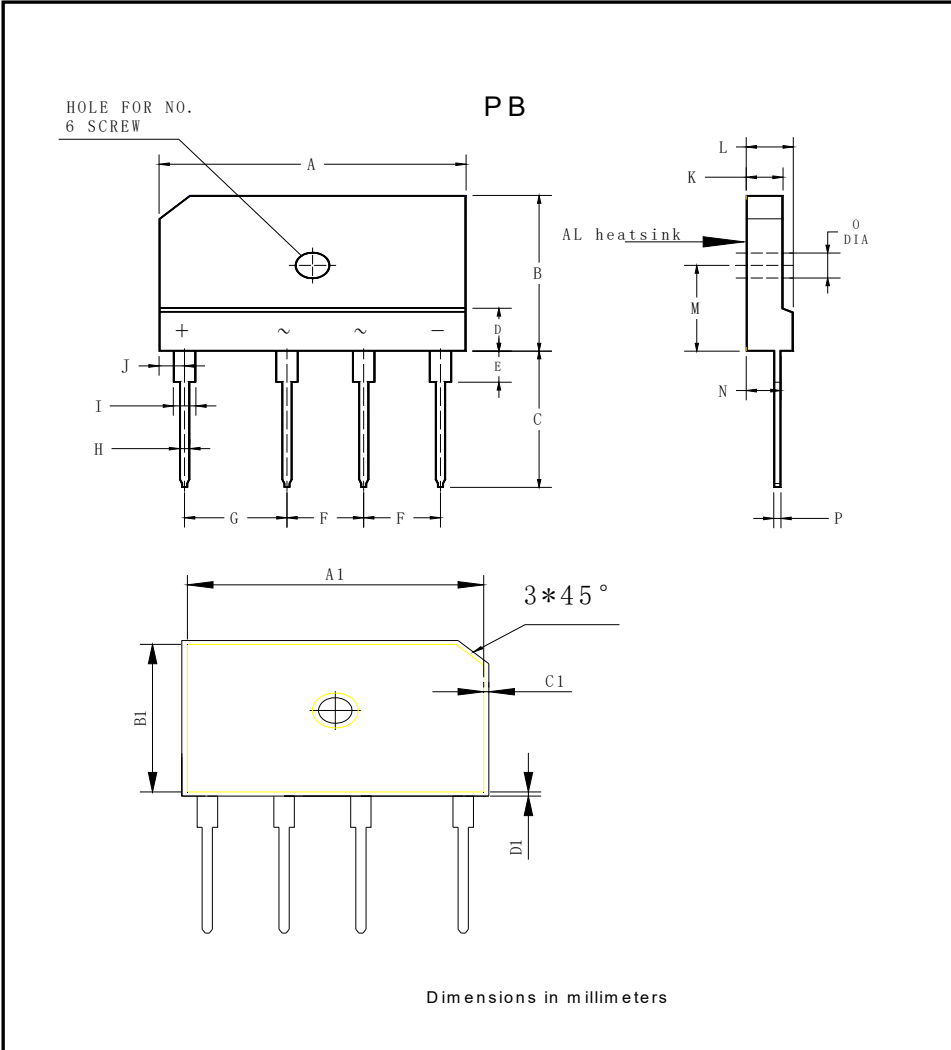
■ Characteristics (Typical)





PB50005 THRU PB5010

■ Outline Dimensions



Dim	PB	
	Min	Max
A	29.7	30.3
B	19.7	20.3
C	17.0	18.0
D	4.8	5.8
E	3.8	4.2
F	7.3	7.7
G	9.8	10.2
H	0.9	1.1
I	2.0	2.4
J	2.3	2.7
K	3.4	3.8
L	4.4	4.8
M	10.8	11.2
N	3.1	3.7
O	3.1	3.4
P	0.6	0.8
A1	28.75	29.15
B1	18.75	19.15
C1	0.3	0.7
D1	0.3	0.7



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.