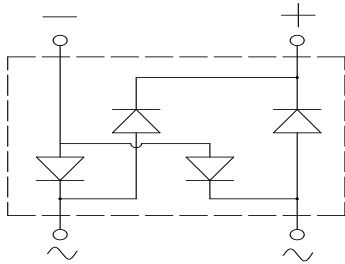
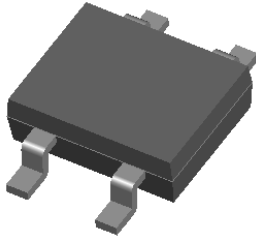


Bridge Rectifiers



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 power supply, lighting ballast, battery charger, home appliances, office equipment, and telecommunication applications.

Mechanical Data

- **Package:** MBL S
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°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBL1S	MBL2S	MBL4S	MBL6S	MBL8S	MBL10S
Device marking code			MBL1S	MBL2S	MBL4S	MBL6S	MBL8S	MBL10S
Repetitive peak reverse voltage	VRRM	V	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, T _a =40°C	On alumina substrate	I _o	A	0.8				
	On glass-epoxy substrate			0.5				
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _j =25°C	IFSM	A	30					
Current squared time @1ms≤t≤8.3ms T _j =25°C, rating of per diode	I ² t	A ² s	3.7					
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	MBL1S	MBL2S	MBL4S	MBL6S	MBL8S	MBL10S
Maximum instantaneous forward voltage drop per diode	V _F	V	IFM=0.4A	1.00					
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{RRM}	5					



MBL1S THRU MBL10S

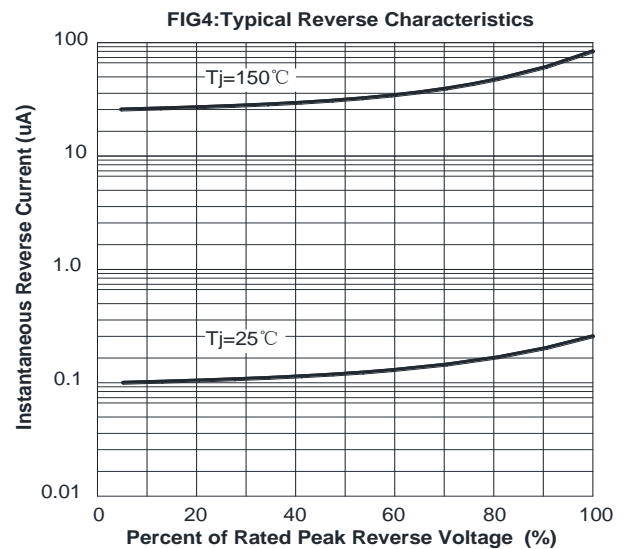
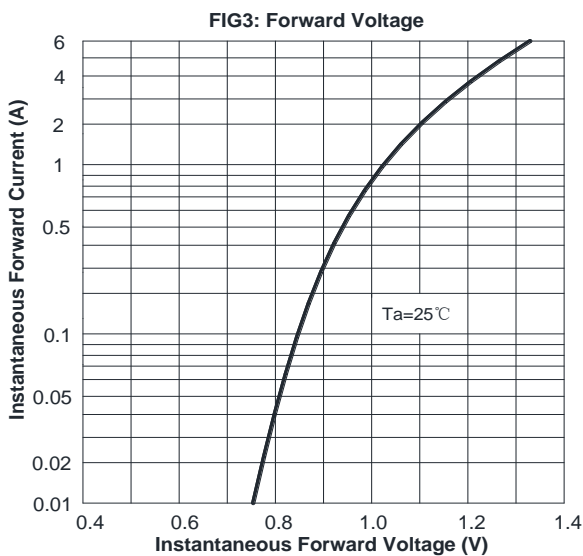
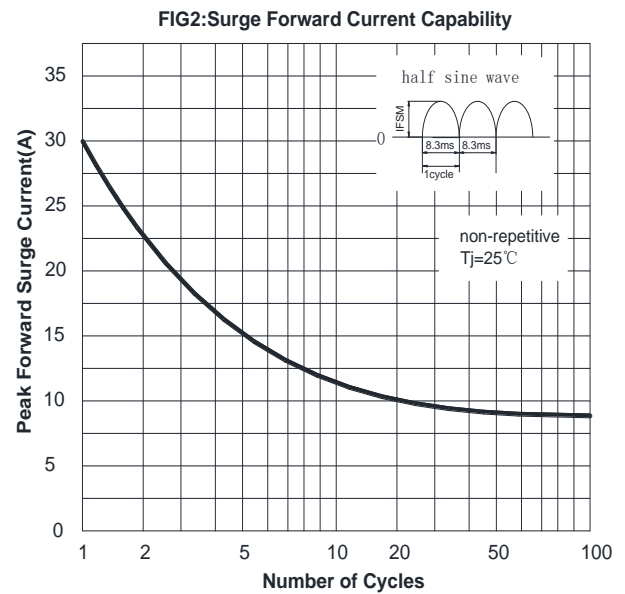
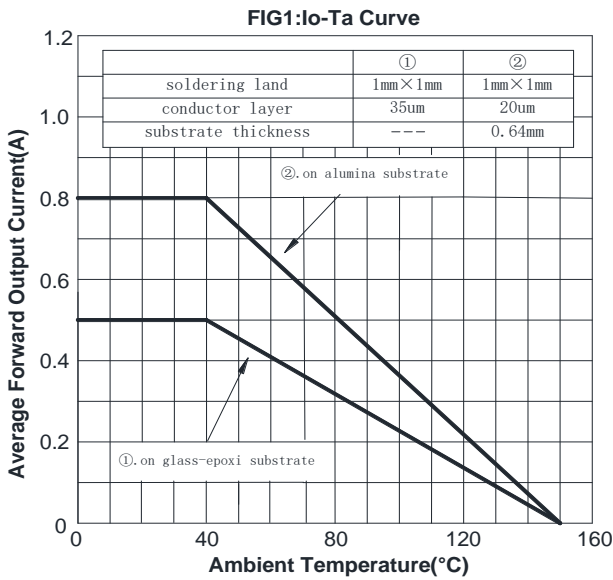
■ Thermal Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MBL1S	MBL2S	MBL4S	MBL6S	MBL8S	MBL10S
Thermal Resistance	Between junction and ambient, On alumina substrate	R θ J-A	$^\circ\text{C}/\text{W}$	76.0					
	Between junction and ambient, On glass-epoxi substrate	R θ J-A		134.0					
	Between junction and lead	R θ J-L		20.0					

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBL1S-MBL10S	F1	Approximate 0.083	4000	8000	64000	13' reel

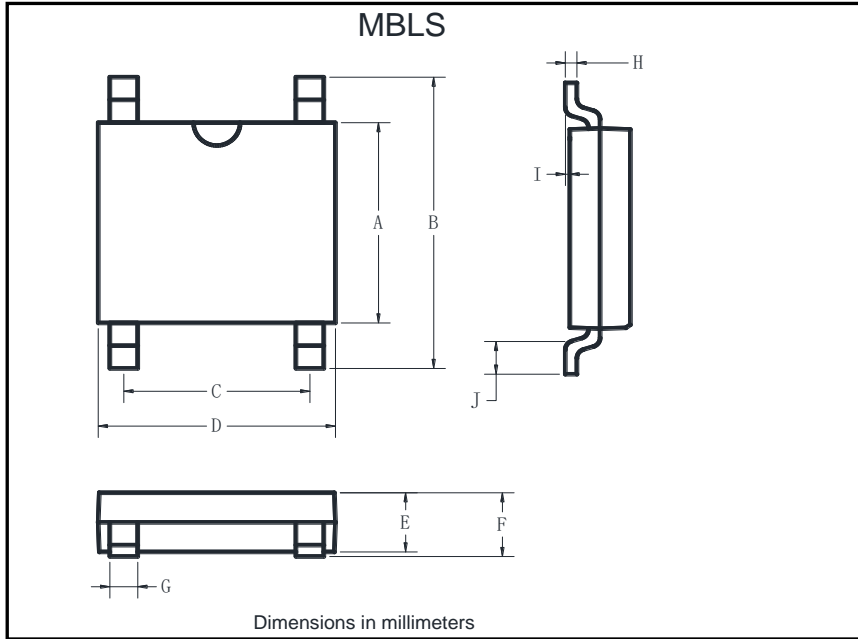
■ Characteristics (Typical)





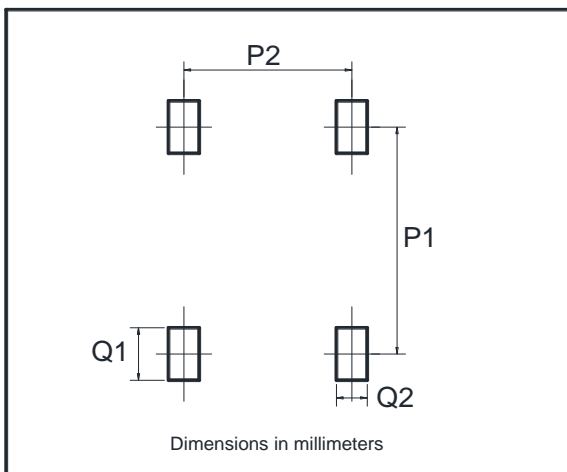
MBL1S THRU MBL10S

■ Outline Dimensions



MBLS		
Dim	Min	Max
A	3.60	4.00
B	6.40	7.00
C	2.20	2.60
D	4.50	4.90
E	1.30	1.50
F	1.40	1.60
G	0.56	0.84
H	0.15	0.35
I	0.20Max	
J	0.70	1.10

■ Suggested pad layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20



MBL1S THRU MBL10S

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.