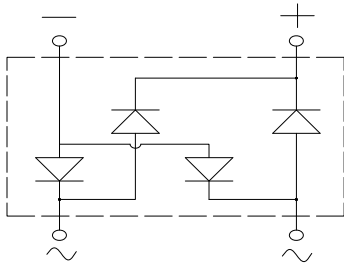
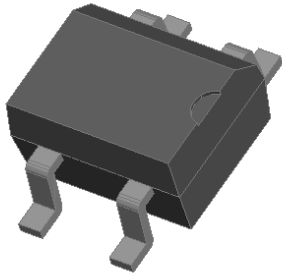


Bridge Rectifiers



Features

- UL recognition, file #E313149
- Ideal for automated placement
- Glass passivated chip junction
- 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:** MBS
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	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S
Device marking code			MB1S	MB2S	MB4S	MB6S	MB8S	MB10S
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	100	200	400	600	800	1000
Maximum RMS Voltage	V _{RMS}	V	70	140	280	420	560	700
Maximum DC blocking Voltage	V _{DC}	V	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, T _c =125°C	I _O	A	0.8					
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave, 1 cycle, T _j =25°C	I _{FSM}	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	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =0.4A	1.0					
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	5					
			T _j =125°C	50					
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	10					



MB1S THRU MB10S

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

PARAMETER		SYMBOL	UNIT	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S
Typical Thermal Resistance	Between junction and ambient	R _{θJ-A}	°C/W	65.0					
	Between junction and lead	R _{θJ-L}		28.0					
	Between junction and case	R _{θJ-C}		20.0					

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

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MB1S ~ MB10S	F1	Approximate 0.12	2500	/	40000	13' reel
MB1S ~ MB10S	F2	Approximate 0.12	3000	/	48000	13' reel

■ Characteristics(Typical)

FIG1: I_o-T_c Curve

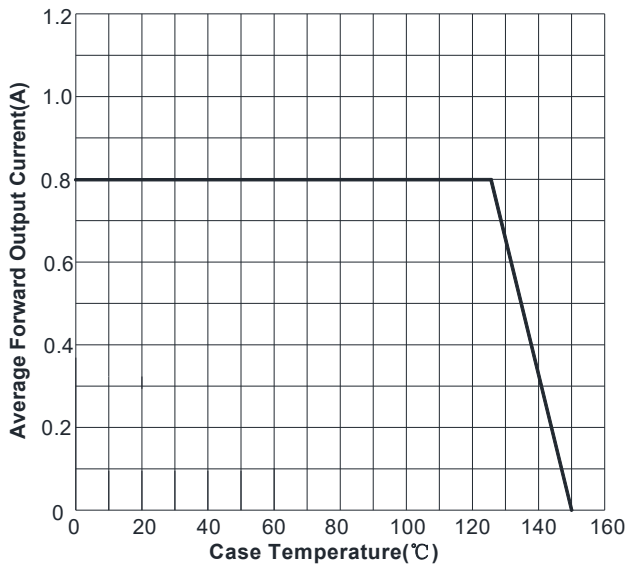


FIG2: Surge Forward Current Capability

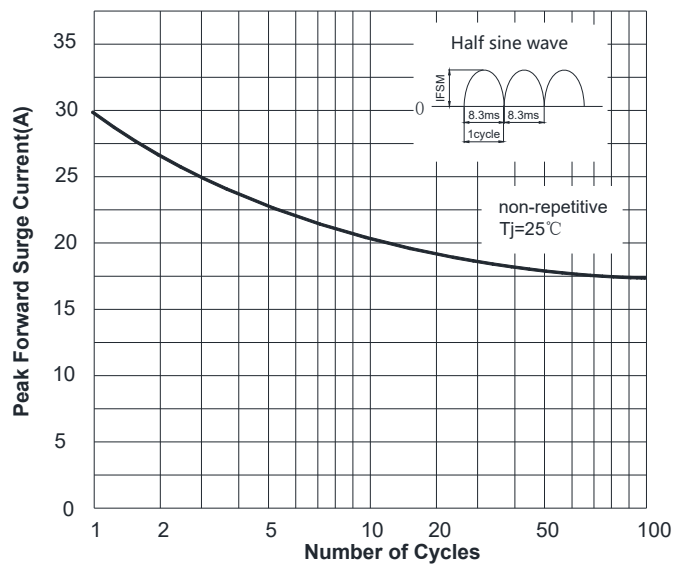


FIG3: Typical Forward Voltage

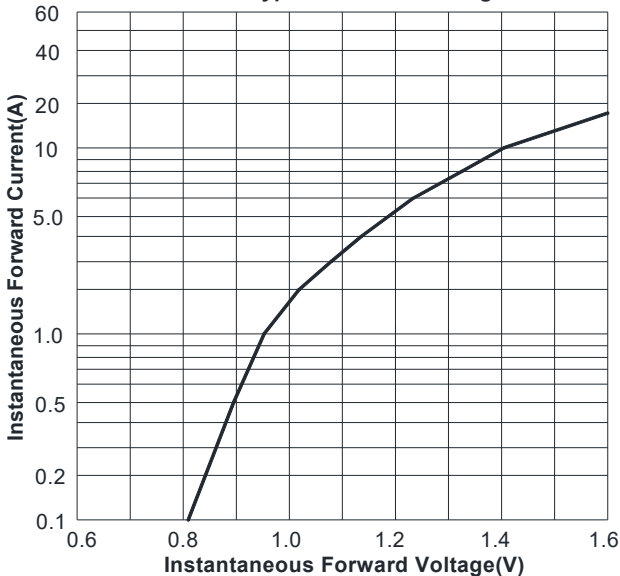
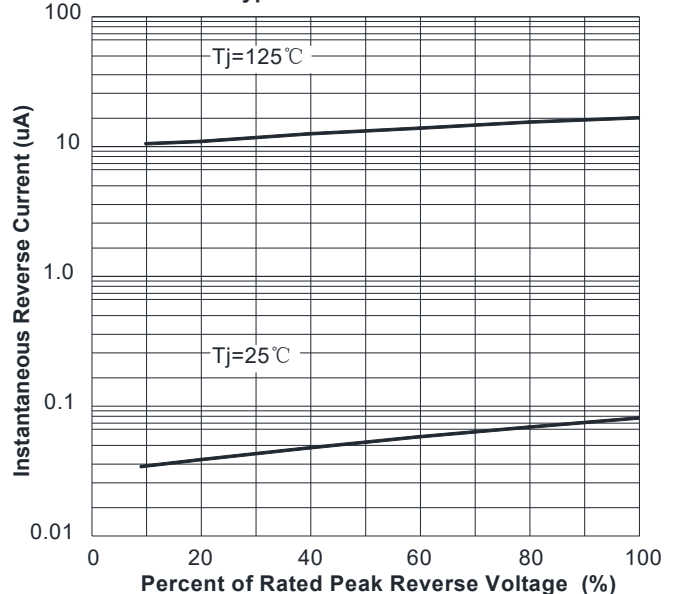


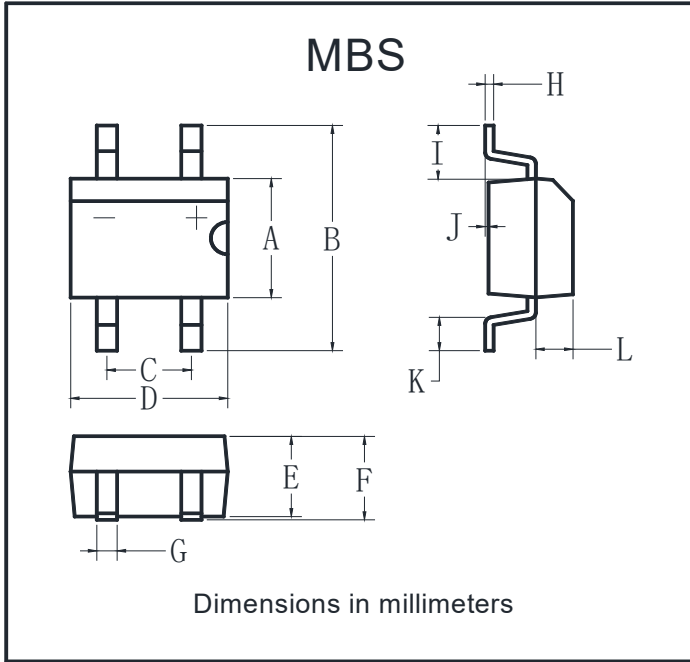
FIG4: Typical Reverse Characteristics





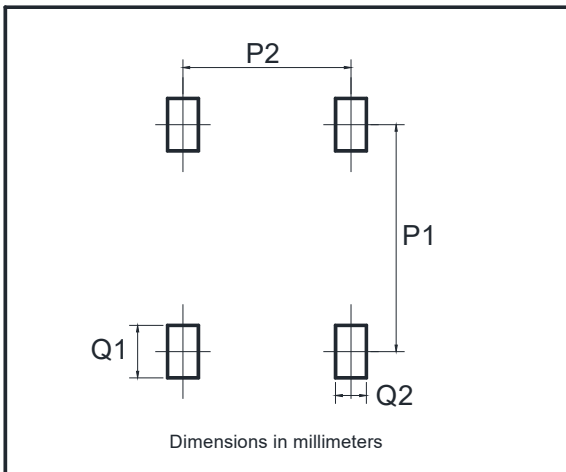
MB1S THRU MB10S

■ Outline Dimensions



MBS		
Dim	Min	Max
A	3.60	4.00
B	7.00 Max	
C	2.20	2.60
D	4.50	4.90
E	2.30	2.70
F	3.00 Max	
G	0.56	0.84
H	0.15	0.35
I	1.10	2.12
J	0.20 Max	
K	0.70	1.10
L	0.95	1.53

■ Suggested pad layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20



MB1S THRU MB10S

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.