

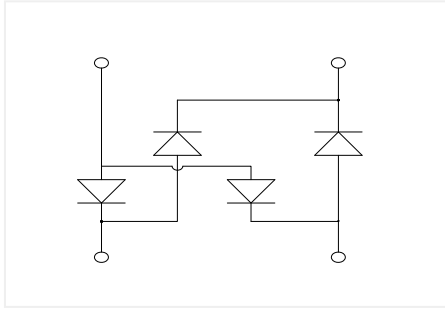
Bridge Rectifiers

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:** MBLS
- 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 ($T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBL1S	MBL2S	MBL4S	MBL6S	MBL8S	MBL10S
Device marking code			MBL1S	MBL2S	MBL4S	MBL6S	MBL8S	MBL10S
Maximum Repetitive Peak Reverse Voltage	VRRM	V	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, $T_c=125$	IO	A	0.8					
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave, 1 cycle, $T_j=25$	IFSM	A	30					
Current squared time @1ms $t < 8.3ms$ $T_j=25$ Rating of per diode	I^2t	A ² s	3.7					
Storage temperature	T_{stg}		-55 ~ +150					
Junction temperature	T_j		-55 ~ +150					

Electrical Characteristics $T_a=25$ Unless otherwise specified

			$T_j=125$	50
Typical junction capacitance	C_j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	10



MBL1S THRU MBL10S

Thermal Characteristics $T_a=25$ Unless otherwise specified

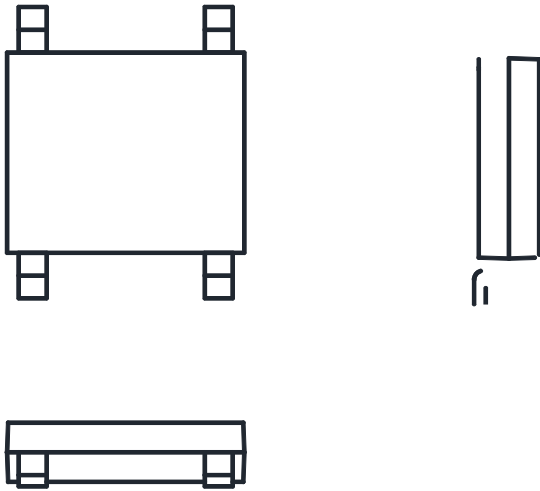
PARAMETER		SYMBOL	UNIT	MBL1S	MBL2S	MBL4S	MBL6S	MBL8S	MBL10S
Typical Thermal Resistance	Between junction and ambient	R J-A	/W	65.0					
	Between junction and lead	R J-L		28.0					
	Between junction and case	R J-C		18.0					

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



MBL1S THRU MBL10S

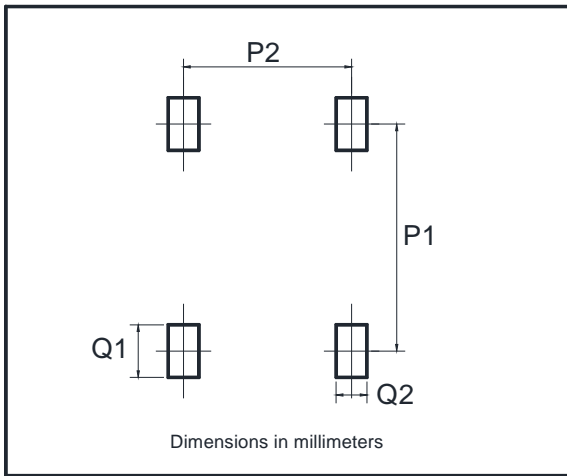
Outline Dimensions



Dimensions in millimeters

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



Dimensions in millimeters

Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20



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