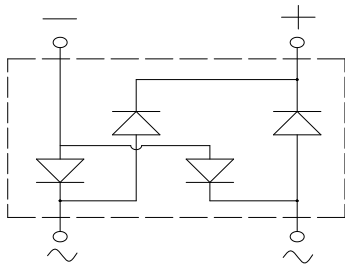
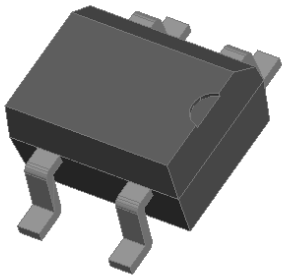


### Bridge Rectifiers



#### 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:** 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<sub>a</sub>=25 °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S
Device marking code			MB1S	MB2S	MB4S	MB6S	MB8S	MB10S
Repetitive peak reverse voltage	V <sub>RRM</sub>	V	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, T <sub>a</sub> =40 °C	On alumina substrate	I <sub>o</sub>	A	0.8				
	On glass-epoxy substrate			0.5				
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T <sub>j</sub> =25 °C	I <sub>FSM</sub>	A	30					
Current squared time @1ms≤t≤8.3ms T <sub>j</sub> =25, rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	3.7					
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150					
Junction temperature	T <sub>j</sub>	°C	-55 ~+150					

#### ■ Electrical Characteristics (T<sub>a</sub>=25 °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =0.4A	1.00					
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =V <sub>RRM</sub>	5					

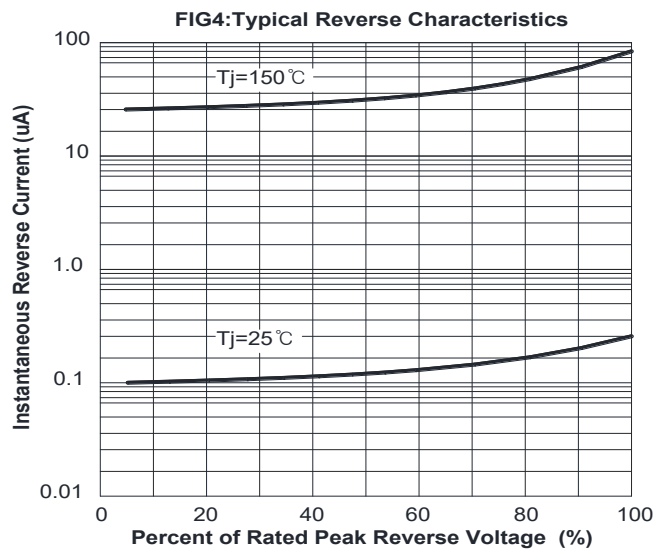
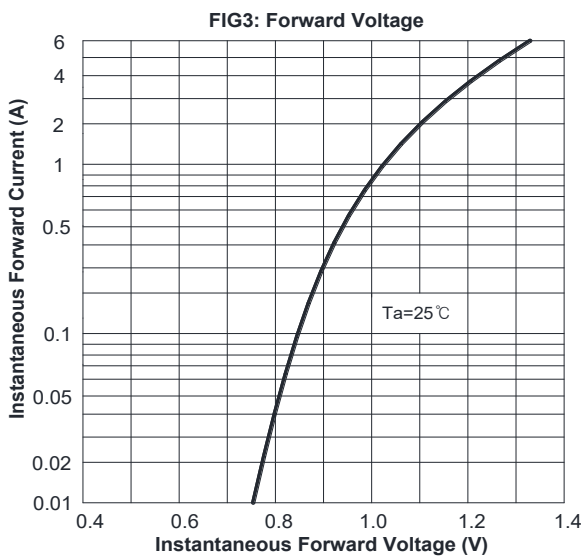
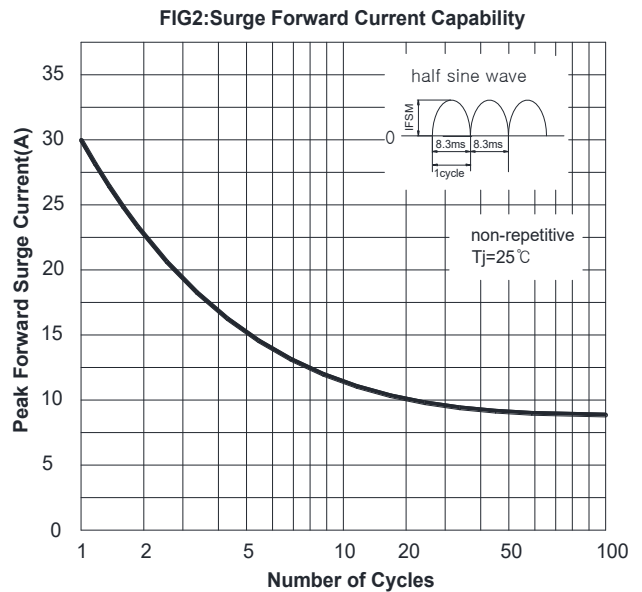
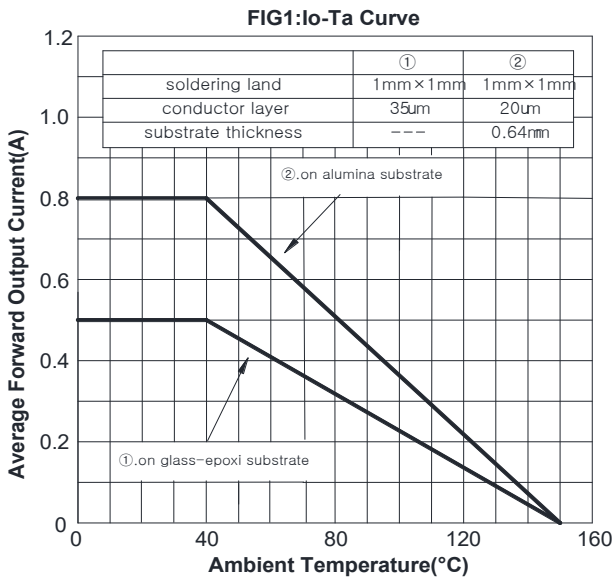
### ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S
Thermal Resistance	Between junction and ambient, On alumina substrate	R <sub>θJA</sub>	°C/W	76.0					
	Between junction and ambient, On glass-epoxi substrate	R <sub>θJA</sub>		134.0					
	Between junction and lead	R <sub>θJL</sub>		20.0					

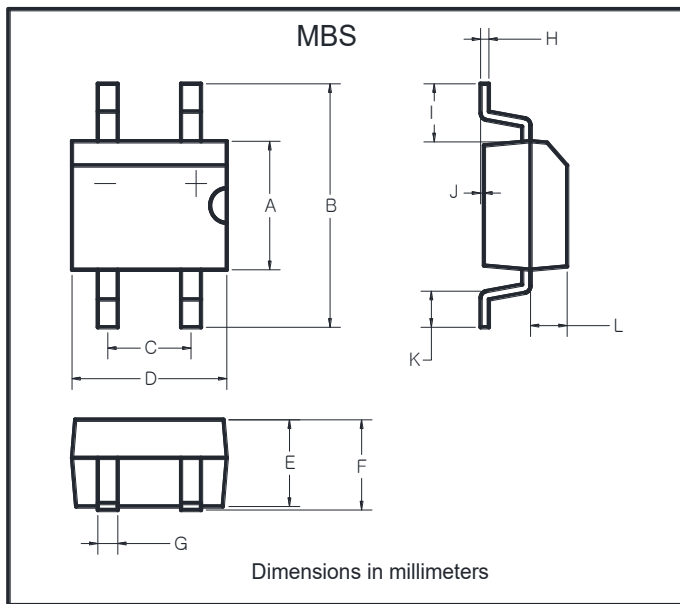
### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
B1S - B10S	F1	Approximate 0.12	2500	5000	40000	13' reel

### ■ Characteristics(Typical)

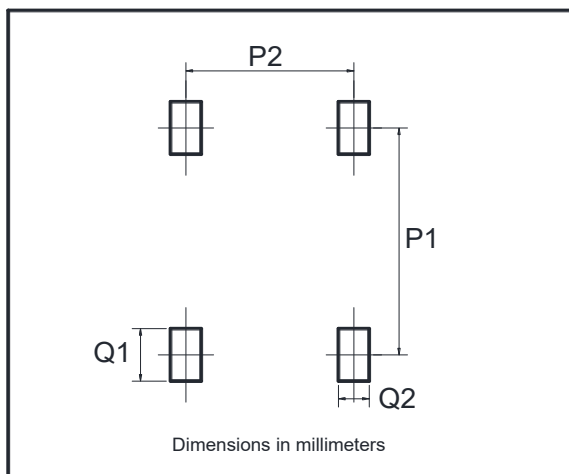


### ■ Outline Dimensions



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