

# OM SENI

## MBS Plastic-Encapsulate Bridge Rectifier

### Features

- Ideal for printed circuit board
- Small size, simple installation
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260/10 seconds at 5lbs., (2.3kg) tension

### MB2S THRU MB10S

Reverse Voltage  
200-1000 V

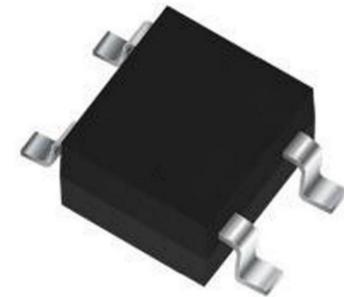
Forward Current  
1.0 Ampere

### Applications

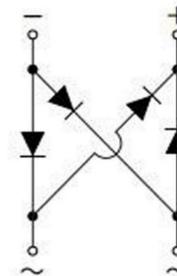
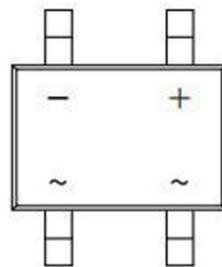
General purpose 1 phase Bridgerectifier applications

### Mechanical Data

- Case: MBS  
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end



### Function Diagram



### Maximum Ratings (Ta=25°C Unless otherwise specified)

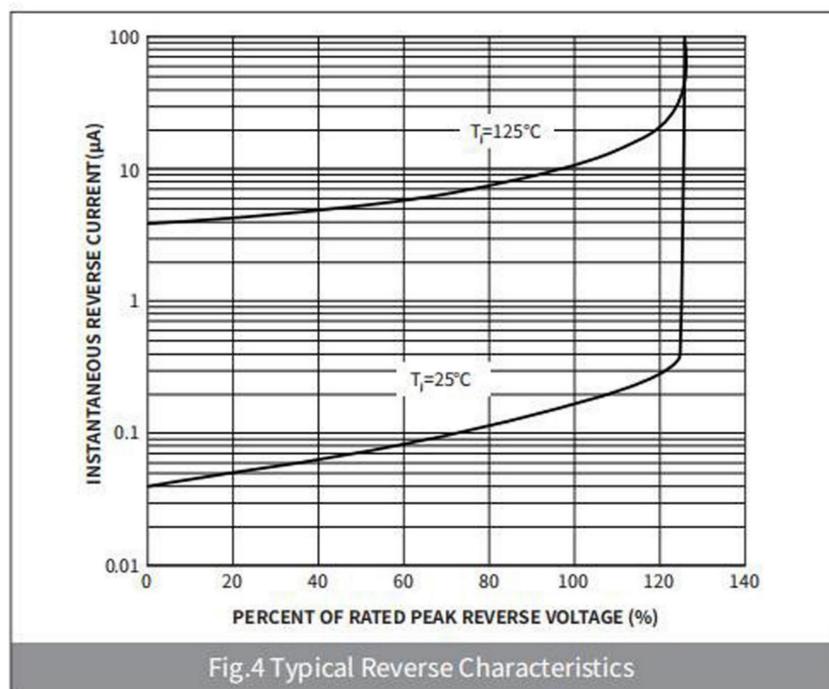
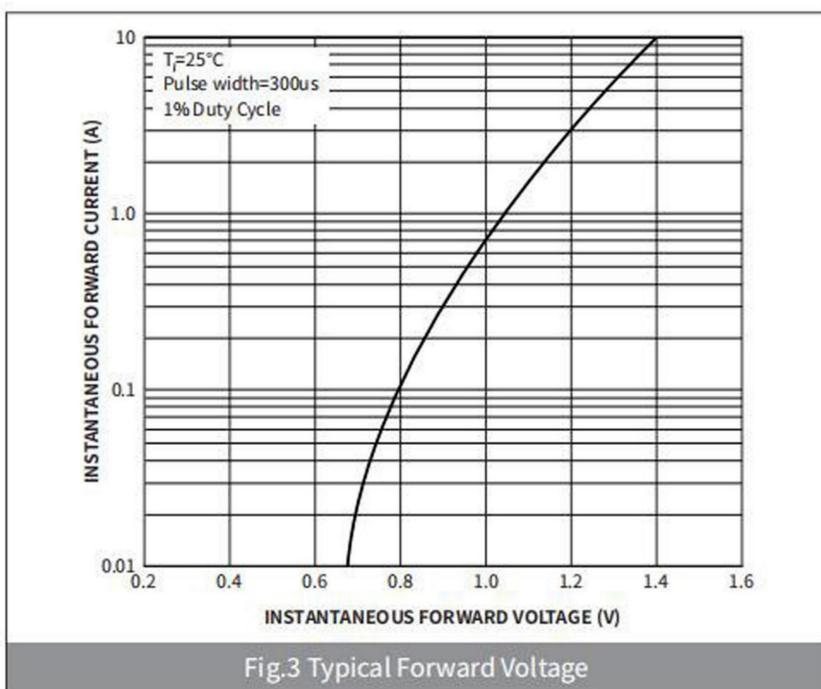
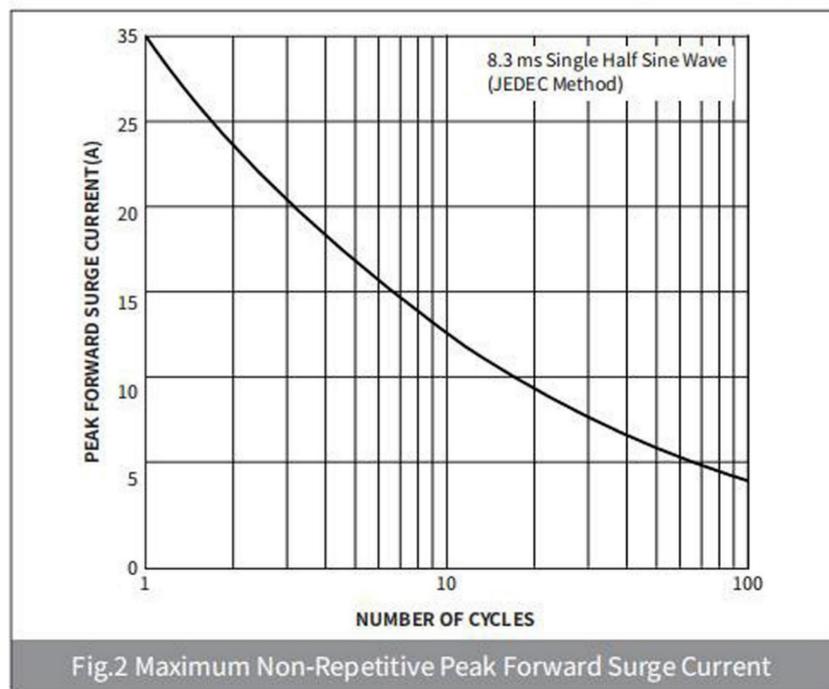
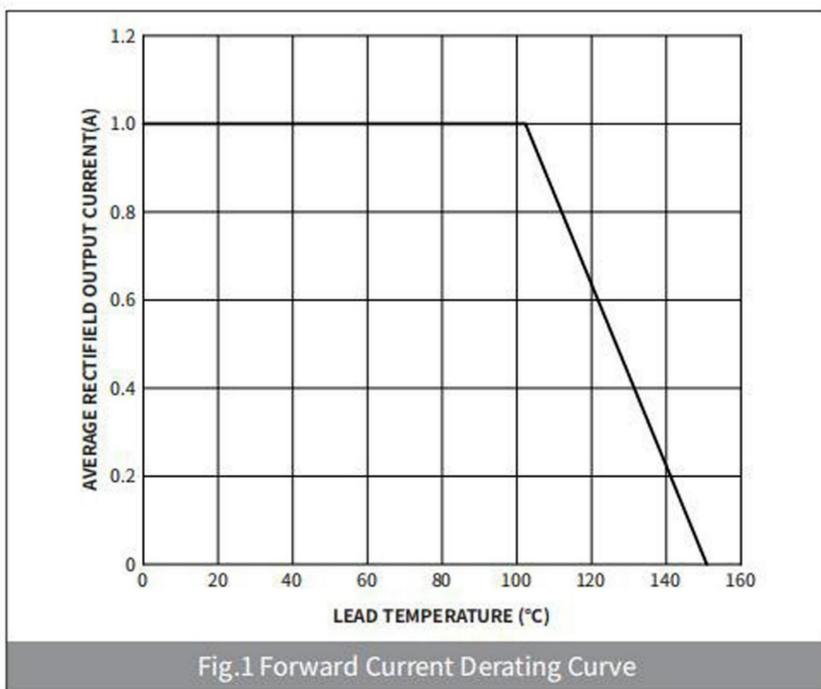
PARAMETER	SYMBOL	UNIT	MB2S	MB4S	MB6S	MB8S	MB10S
Device marking code			MB2S	MB4S	MB6S	MB8S	MB10S
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	V	200	400	600	800	1000
Maximum RMS Voltage	$V_{RMS}$	V	140	280	420	560	700
Maximum DC blocking Voltage	$V_{DC}$	V	200	400	600	800	1000
Maximum Average Forward Rectified Current @60Hz sinewave, Resistance load, TL (Fig.1)	$I_{F(AV)}$	A	1.0				
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	$I_{FSM}$	A	35				
Rating for fusing (t=8.3ms, Ta=25 °C)	$I^2t$	A <sup>2</sup> S	5.08				
Storage temperature	$T_{stg}$	°C	-55 ~ +150				
Junction temperature	$T_j$	°C	-55 ~ +150				
Typical Thermal Resistance	$R_{\theta JA}$	°C/W	85				
	$R_{\theta JL}$	°C/W	20				

# OM SENI

## Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	MB2S	MB4S	MB6S	MB8S	MB10S
Maximum instantaneous forward voltage	$I_F=1.0A$	$V_F$	V			1.1		
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_A=25^\circ C$	$I_{R1}$	$\mu A$			5.0		
	$V_R=V_{DC}, T_A=100^\circ C$	$I_{R2}$				500		
Typical junction capacitance	4.0V DC, 1MHz	$C_J$	pF			18		

## Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



# OM SENI

## Ordering Information

PACKAGE	PACKAGE CODE	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
MBS	R3	3000	6000	30000	13"

## Package Outline Dimensions (MBS)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.5	4.9	0.177	0.193
A1	-	0.2	-	0.008
B	2.3	2.7	0.09	0.106
C	-	7.0	-	0.275
E	3.6	4.0	0.142	0.157
N	0.15	0.35	0.006	0.014
L	0.7	1.1	0.027	0.043
b	0.5	0.8	0.019	0.031
e	2.3	2.7	0.090	0.106

## Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
N	6.0	6.2	0.236	0.244
M	2.4	2.6	0.094	0.102
X	1.84	2.0	0.072	0.079
Y	1.2	1.4	0.047	0.055