

MB2S THRU MB10S

MBS 1.0 AMP Plastic-Encapsulate Bridge Rectifier

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

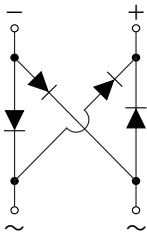
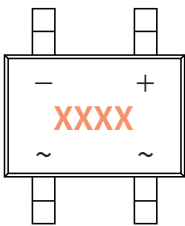
Applications

General purpose 1 phase Bridgerectifier applications

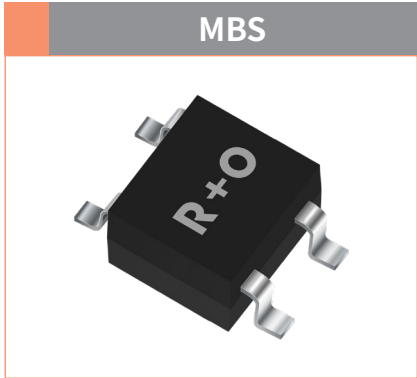
Mechanical Data

- 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



Reverse Voltage
200-1000 V
Forward Current
1.0 Ampere



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 ² S	5.08				
Storage temperature	T_{stg}	°C	-55 ~ +150				
Junction temperature	T_j	°C	-55 ~ +150				
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	85				
	$R_{\theta J-L}$	°C /W	20				

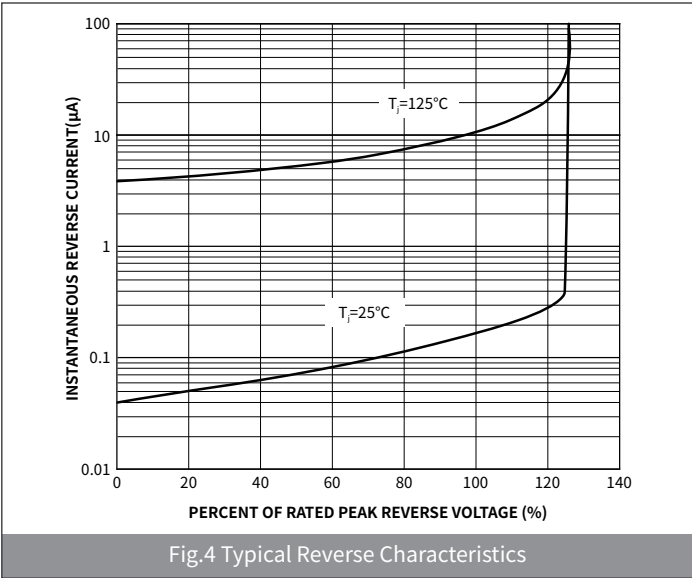
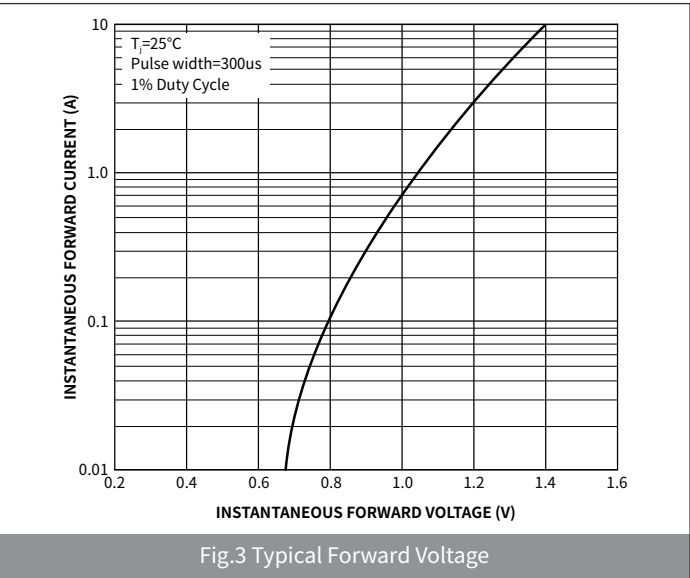
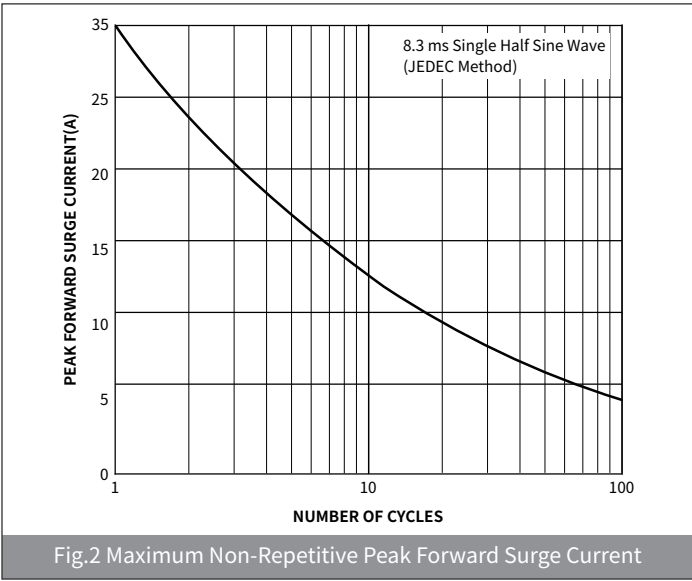
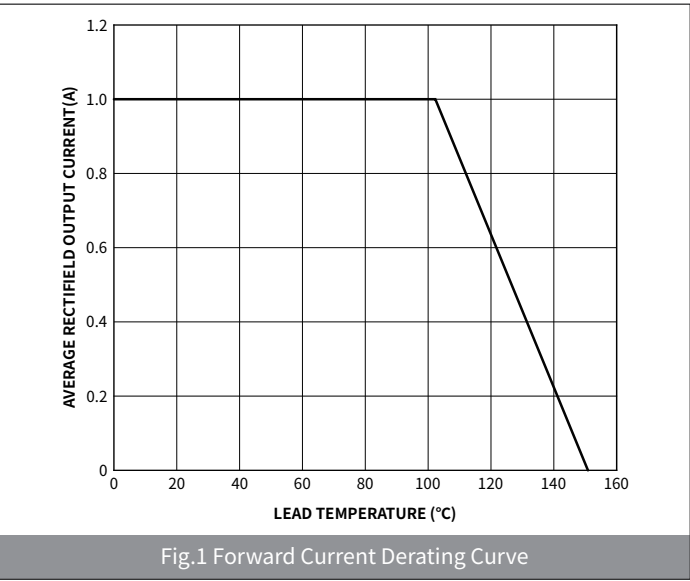
MB2S THRU MB10S

MBS 1.0 AMP Plastic-Encapsulate Bridge Rectifier

● **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}	μA	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)



MB2S THRU MB10S

MBS 1.0 AMP Plastic-Encapsulate Bridge Rectifier

Ordering Information

PACKAGE	PACKAGE CODE	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
MBS	R3	3000	6000	48000	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