

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

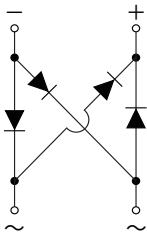
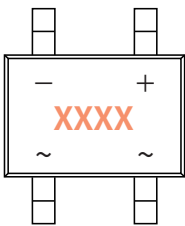
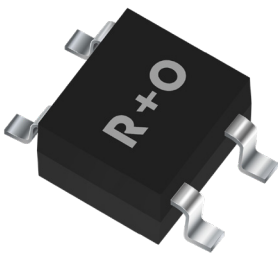
Mechanical Data

- 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

MBS



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				

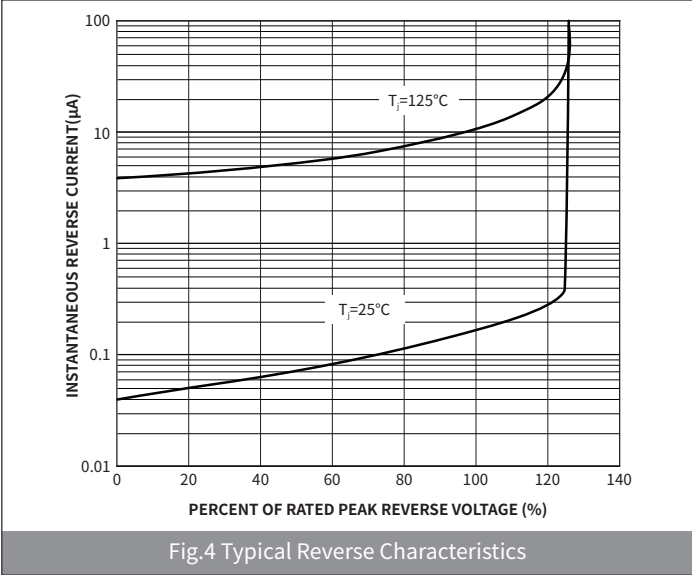
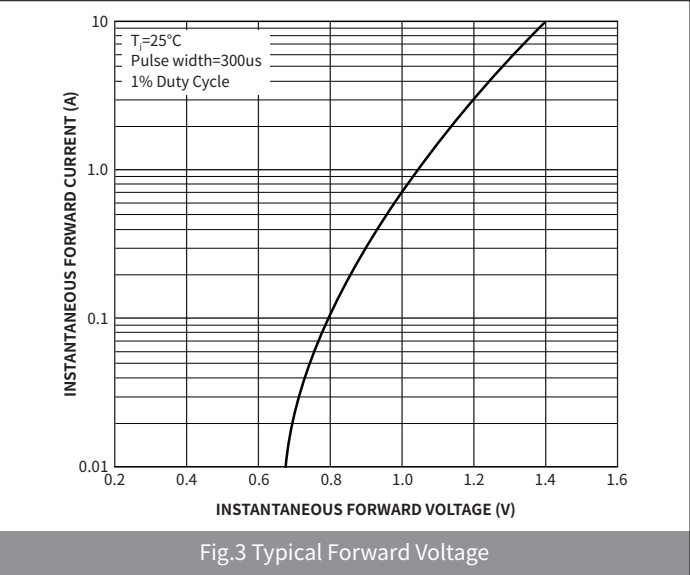
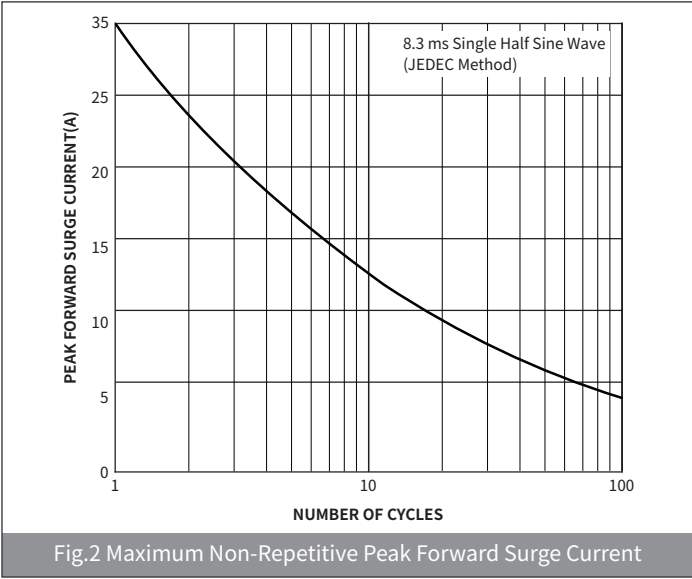
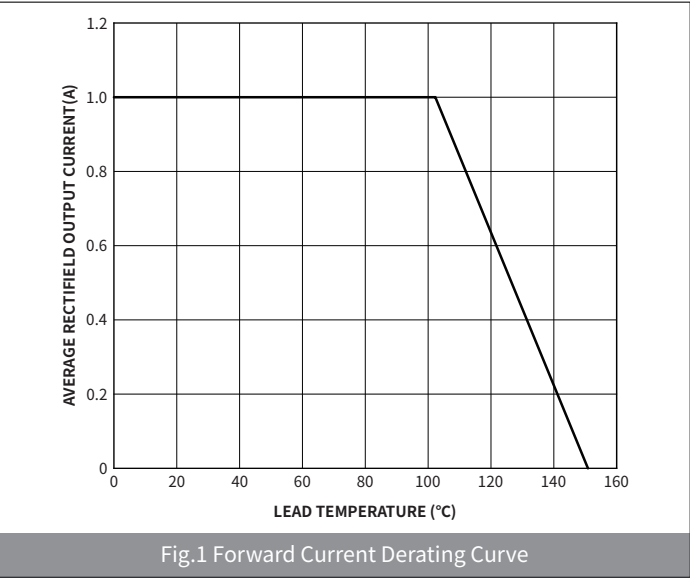
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Electrical Characteristics (Ta=25°C Unless otherwise noted)

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)



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● 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