



MB05S – MB10S

SURFACE MOUNT BRIDGE RECTIFIERS

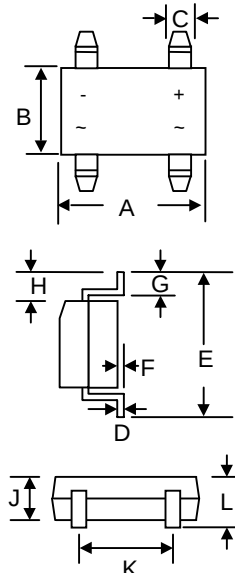
Features

- Glass Passivated Die Construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-35A peak
- Designed for Surface Mount Application
- Plastic Material-UL Flammability 94V-0
- UL Recognized File # E476623

Mechanical Data

- Case:Reliable low cost construction utilizing molded plastic technique
- Terminals:Plated Leads Solderable per MIL-STD-202,Method208
- Polarity:As Marked on Case
- Mounting Position:Any
- Marking:Type Number

MB-S



MB-S		
Dim	Min	Max
A	4.50	4.95
B	3.60	4.10
C	0.60	0.80
D	0.15	0.35
E	6.40	7.00
F	—	0.20
G	0.50	1.10
H	1.30	1.70
J	2.30	2.70
K	2.30	2.70
L	—	3.00
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}							
DC Blocking Voltage	V _{DC}							
RMS Reverse Voltage	V _{RMS}	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@T _C =100℃	I _{F(AV)}	1.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	35						A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	5.084						A ² s
Forward Voltage per element @I _F =0.5A @I _F =1.0A	V _{FM}	0.95 1.0						V
Peak Reverse Current @T _A =25℃ At Rated DC Blocking Voltage @T _A =125℃	I _R	5.0 200						uA
Typical Junction Capacitance per leg (Note 2)	C _J	13						pF
Typical Thermal Resistance per leg	R _{θJA}	60						℃/W
	R _{θJL}	16						
Operating and Storage Temperature Range	T _J ,T _{STG}	-55to+150						℃

Note:1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

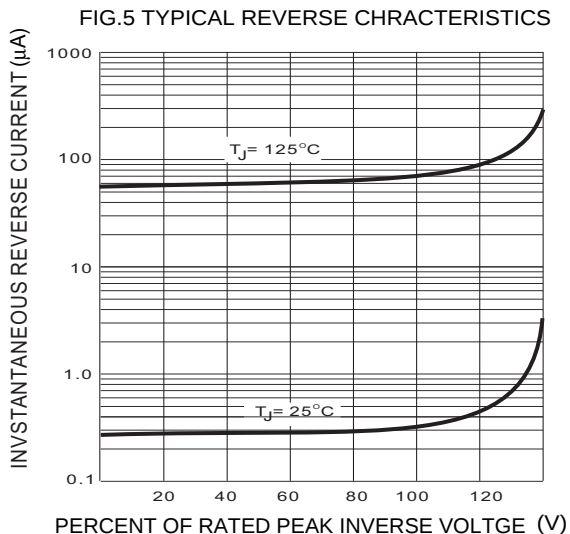
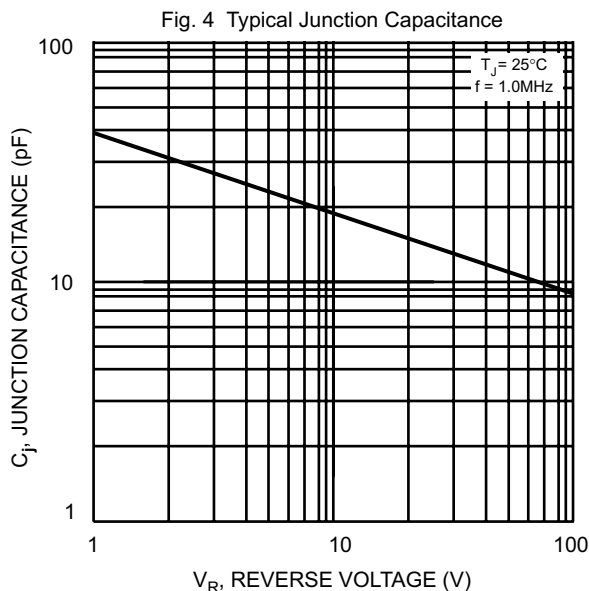
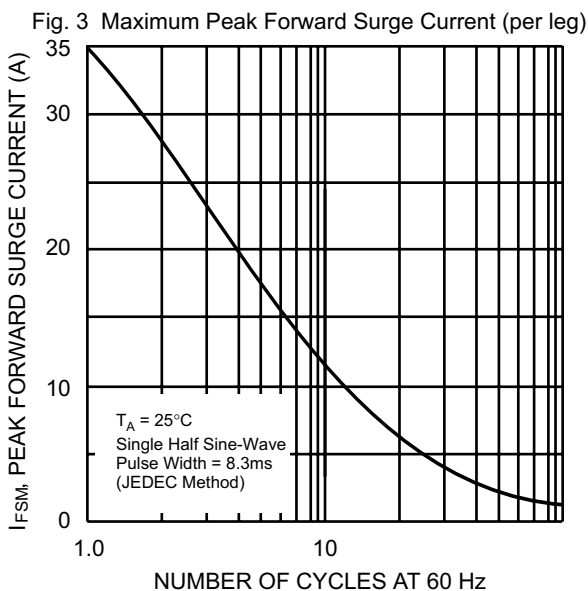
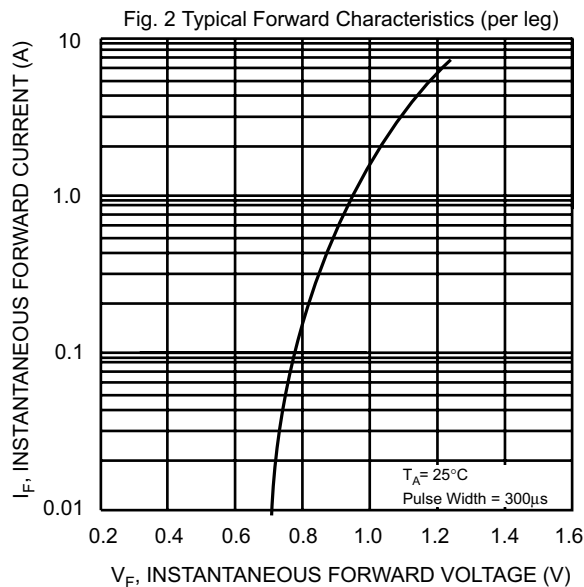
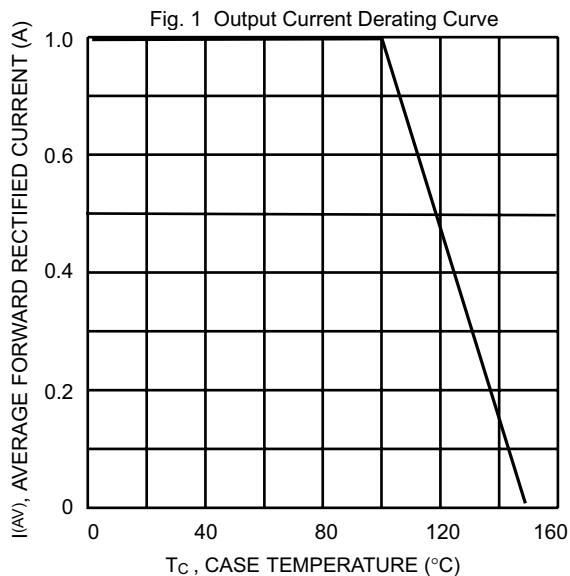


FIG.6 MOUNTING PAD LAYOUT

