

## MB105F thru MB110F

# GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts FORWARD CURRENT - 1 Ampere

### **FEATURES**

- Glass passivated die construction
- ●Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

## **MECHANICAL DATA**

●Case: MB-F, molded plastic

● Terminals: plated leads solderable per MIL-STD-202,

Method 208

Polarity: as marked on case

Mounting position :Any

Marking: type number

●Lead Free: For RoHS / Lead Free Version

# 008(0.2) .008(0.2)

Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

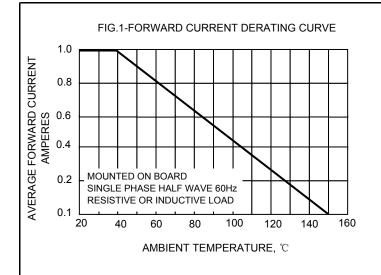
For capacitive load, derate current by 20%

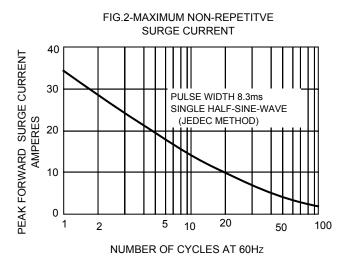
| CHARACTERISTICS  | SYMBOL | MB105F      | MB11F | MB12F | MB14F | MB16F | MB18F | MB110F | UNIT       |
|--|--------|-------------|-------|-------|-------|-------|-------|--------|------------|
| Maximum Recurrent Peak Reverse Voltage   | VRRM   | 50          | 100   | 200   | 400   | 600   | 800   | 1000   | V          |
| Maximum RMS Voltage  | VRMS   | 35          | 70    | 140   | 280   | 420   | 560   | 700    | V          |
| Maximum DC Blocking Voltage  | VDC    | 50          | 100   | 200   | 400   | 600   | 800   | 1000   | V          |
| Maximum Average Forward  Rectified Current (Note 1) @Ta=40 °C                                    | I(AV)  | 1.0         |       |       |       |       |       |        | Α          |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method) | IFSM   | 35          |       |       |       |       |       |        | А          |
| Peak Forward Voltage at 1A DC  | VF     | 1.1         |       |       |       |       |       | V      |            |
| Maximum DC Reverse Current @TJ=25℃ at Rated DC Bolcking Voltage @TJ=125℃                         | lR     | 5.0<br>500  |       |       |       |       |       |        | μΑ         |
| Typical Junction Capacitance Per Element (Note2)   | CJ     | 25          |       |       |       |       |       |        | pF         |
| Typical Thermal Resistance (Note3)   | RθJA   | 60          |       |       |       |       |       |        | °C/W       |
|  | Rejl   | 16          |       |       |       |       |       |        |            |
| Operating Temperature Range  | TJ     | -55 to +150 |       |       |       |       |       |        | $^{\circ}$ |
| Storage Temperature Range  | Tstg   | -55 to +150 |       |       |       |       |       |        | $^{\circ}$ |

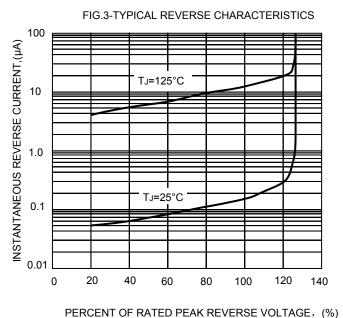
NOTES:1.Mounted on P.C. board.

- 2.Measured at1.0MHz and applied reverse voltage of 4.0V DC.
- 3. Thermal resistance junction to case.
- 4.The typical data above is for reference only(典型值仅供参考).









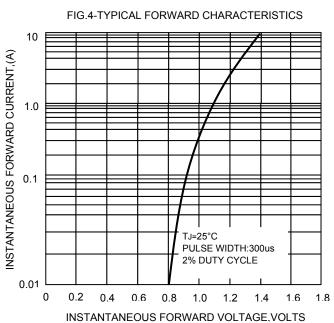
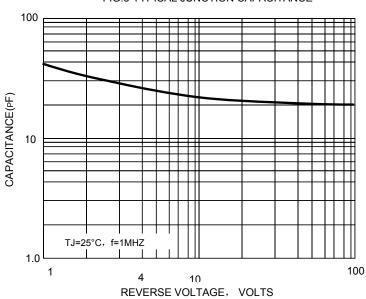


FIG.5-TYPICAL JUNCTION CAPACITANCE



|The curve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

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