



安徽富信半导体科技有限公司

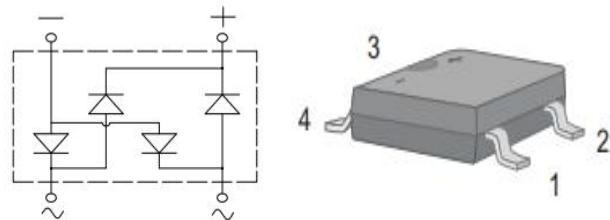
ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

MB1F-MB10F

Bridge Rectifier Diode 整流桥

■Features 特点

Glass passivated chip junction 玻璃钝化结
 High surge current capability 高浪涌电流能力
 Reflow Solder Temperature 220°C 回流焊温度 220 度
 Package 封装: MBF



■Maximum Rating 最大额定值

($T_A=25^\circ\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

| Characteristic 特性参数 | Symbol 符号 | MB1F | MB2F | MB4F | MB6F | MB8F | MB10F | Unit 单位 |
|--|-----------------|---|------|------|------|------|-------|---------------------------|
| Peak Reverse Voltage 反向峰值电压 | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| DC Reverse Voltage 直流反向电压 | $V_{R(DC)}$ | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage 反向电压均方根值 | $V_{R(RMS)}$ | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Forward Rectified Current 正向整流电流 | I_F | 0.8 | | | | | | A |
| Peak Surge Current 峰值浪涌电流 | I_{FSM} | 30 | | | | | | A |
| Thermal Resistance J-A 结到环境热阻 | $R_{\theta JA}$ | 90 | | | | | | $^\circ\text{C}/\text{W}$ |
| Junction and Storage Temperature 结温和储藏温度 | T_J, T_{stg} | $150^\circ\text{C}, -55 \text{ to } +150^\circ\text{C}$ | | | | | | |

■Electrical Characteristics 电特性

($T_A=25^\circ\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

| Characteristic 特性参数 | Symbol 符号 | Min 最小值 | Typ 典型值 | Max 最大值 | Unit 单位 | Condition 条件 |
|---|-----------|---------|---------|---------|---------------|--------------------------------|
| Forward Voltage 正向电压降 | V_F | | 1.1 | | V | $I_F=0.8\text{A}$ |
| Reverse Current ($T_A=25^\circ\text{C}$) 反向漏电流($T_A=125^\circ\text{C}$) | I_R | | | 5 40 | μA | $V_R=V_{RRM}$ |
| Diode Capacitance 二极管电容 | C_D | | 13 | | pF | $V_R=4\text{V}, f=1\text{MHz}$ |

■ Typical Characteristic Curve 典型特性曲线

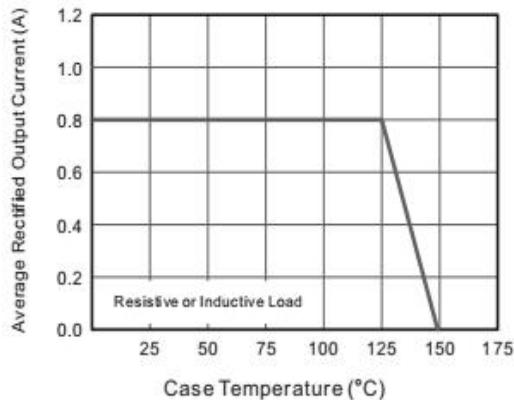


Figure 1: Forward Current Derating Curve

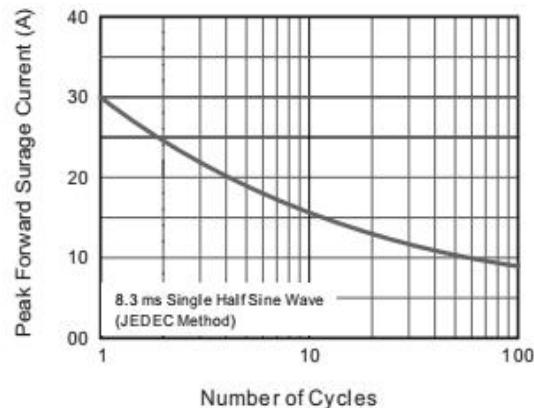


Figure 2: Peak Forward Surge Current

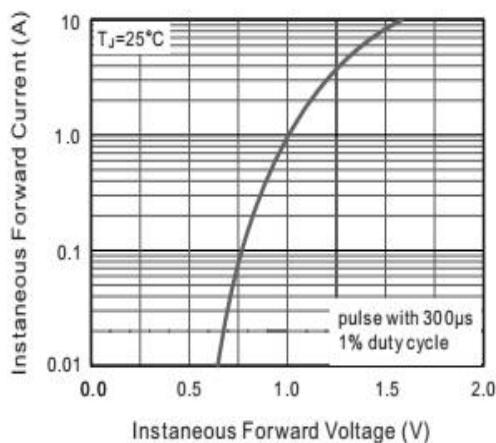


Figure 3: Instantaneous Forward Characteristics

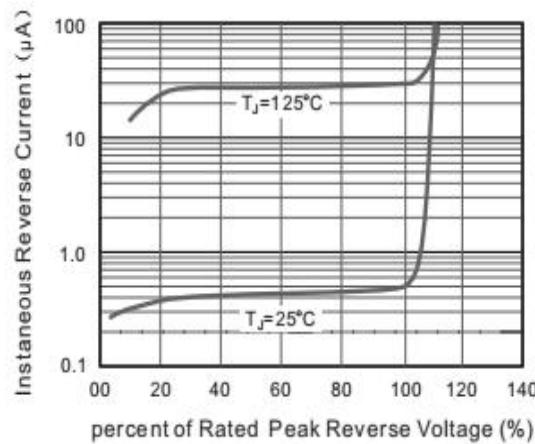


Figure 4: Reverse Leakage Characteristics

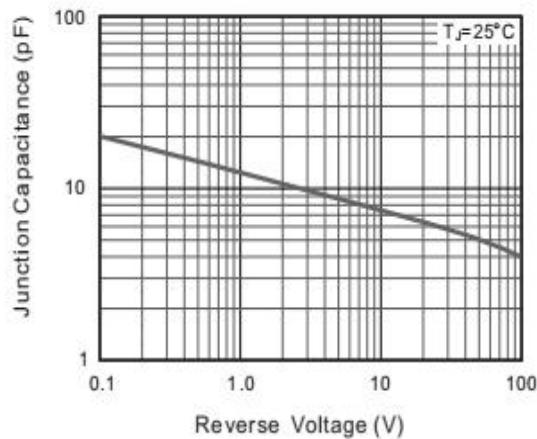
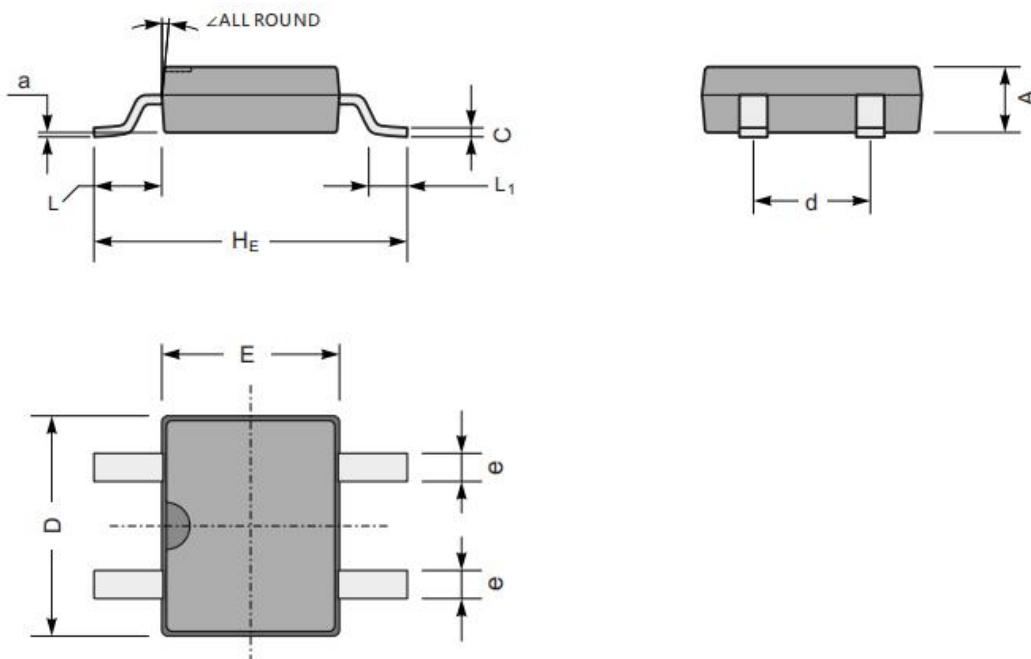


Figure 5: Junction Capacitance Characteristics

■ Dimension 外形封装尺寸



MBF mechanical data

| UNIT | | A | C | D | E | H _E | d | e | L | L ₁ | a | ∠ |
|------|-----|-----|------|-----|-----|----------------|-----|-----|-----|----------------|-----|----|
| mm | max | 1.6 | 0.22 | 5.0 | 4.1 | 7.0 | 2.7 | 0.8 | 1.7 | 1.1 | 0.2 | 7° |
| | min | 1.2 | 0.15 | 4.5 | 3.6 | 6.4 | 2.3 | 0.5 | 1.3 | 0.5 | — | |
| mil | max | 63 | 8.7 | 197 | 161 | 276 | 106 | 31 | 67 | 43 | 8 | 7° |
| | min | 47 | 5.9 | 177 | 142 | 252 | 91 | 20 | 51 | 20 | — | |