

**描述 / Descriptions**

0.8A 表面贴装玻璃钝化整流桥，薄型 MBF 封装。

0.8A Surface Mount Glass Passivated Bridge Rectifier, MBF thin package.

**特征 / Features**

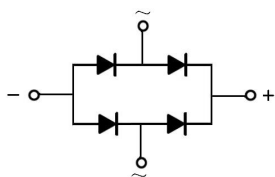
玻璃钝化芯片，反向电压：100V~1000V，正向电流：0.8A，浪涌电流大，适用于表面贴装。无卤产品。

Glass Passivated Chip Junction, Reverse Voltage:100to1000V, Forward Current:0.8 A, High Surge Current Capability, Designed for Surface Mount Application.Halogen free product.

**用途 / Applications**

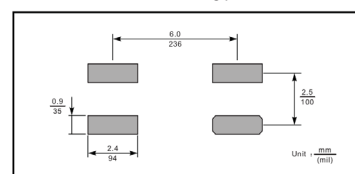
一般用途。

General purpose.

**内部等效电路 / Equivalent Circuit****引脚排列 / Pinning**

| PIN | DESCRIPTION          |
|-----|----------------------|
| 1   | Input Pin ( ~ )      |
| 2   | Input Pin ( ~ )      |
| 3   | Output Anode ( + )   |
| 4   | Output Cathode ( - ) |

The recommended mounting pad size

**印章代码 / Marking**

见印章说明。See Marking Instructions.


**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

| 参数<br>Parameter                                                                                  | 符号<br>Symbol                      | 数值<br>Rating |      |      |      |      |       | 单位<br>Unit |
|--------------------------------------------------------------------------------------------------|-----------------------------------|--------------|------|------|------|------|-------|------------|
|                                                                                                  |                                   | MB1F         | MB2F | MB4F | MB6F | MB8F | MB10F |            |
| Maximum Recurrent Peak Reverse Voltage                                                           | V <sub>RRM</sub>                  | 100          | 200  | 400  | 600  | 800  | 1000  | V          |
| Maximum RMS Voltage                                                                              | V <sub>RMS</sub>                  | 70           | 140  | 280  | 420  | 560  | 700   | V          |
| Maximum DC Blocking Voltage                                                                      | V <sub>DC</sub>                   | 100          | 200  | 400  | 600  | 800  | 1000  | V          |
| Average Rectified Output Current at Ta = 50℃                                                     | I <sub>F(AV)</sub>                | 0.8          |      |      |      |      |       | A          |
| Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I <sub>FSM</sub>                  | 30           |      |      |      |      |       | A          |
| Typical Junction Capacitance <sup>1)</sup>                                                       | C <sub>j</sub>                    | 13           |      |      |      |      |       | pF         |
| Typical Thermal Resistance <sup>2)</sup>                                                         | R <sub>θJA</sub>                  | 95           |      |      |      |      |       | ℃/W        |
|                                                                                                  | R <sub>θJL</sub>                  | 30           |      |      |      |      |       |            |
| Operating and Storage Temperature Range                                                          | T <sub>J</sub> , T <sub>stg</sub> | -55~+150     |      |      |      |      |       | ℃          |

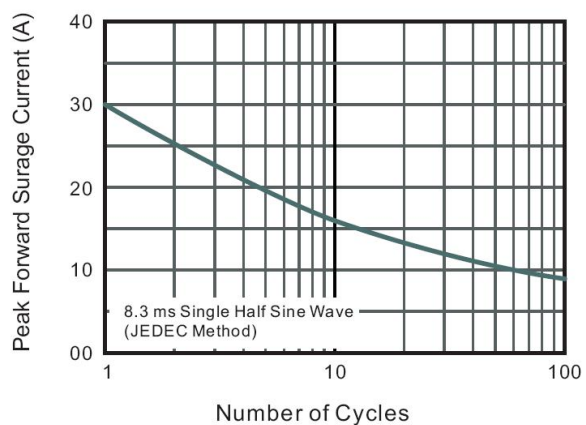
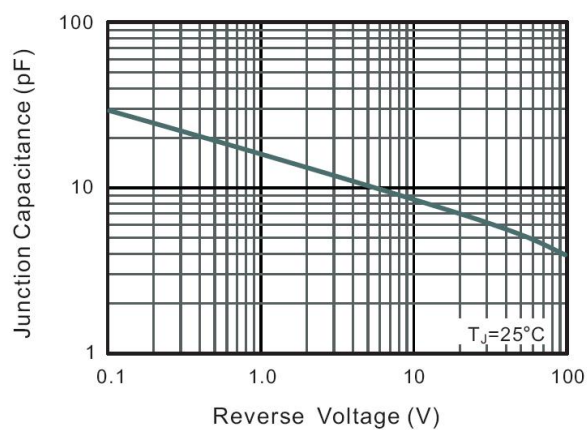
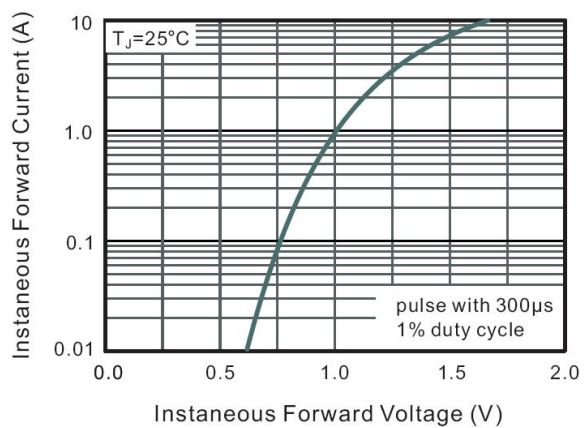
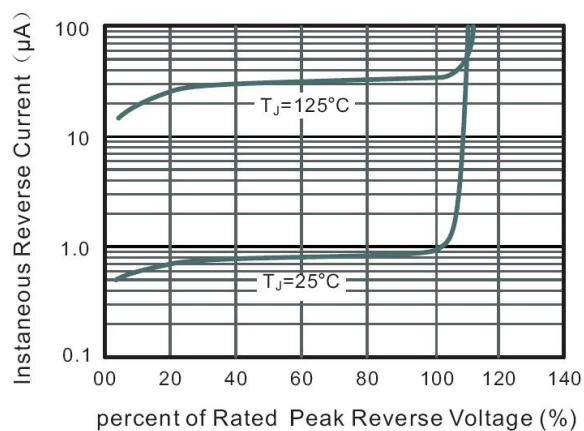
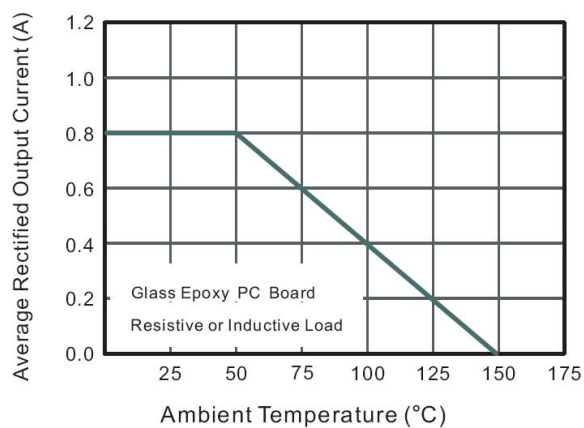
Note:

1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 4×(5×5mm<sup>2</sup>) copper pad.

**电性能参数 / Electrical Characteristics(Ta=25°C)**

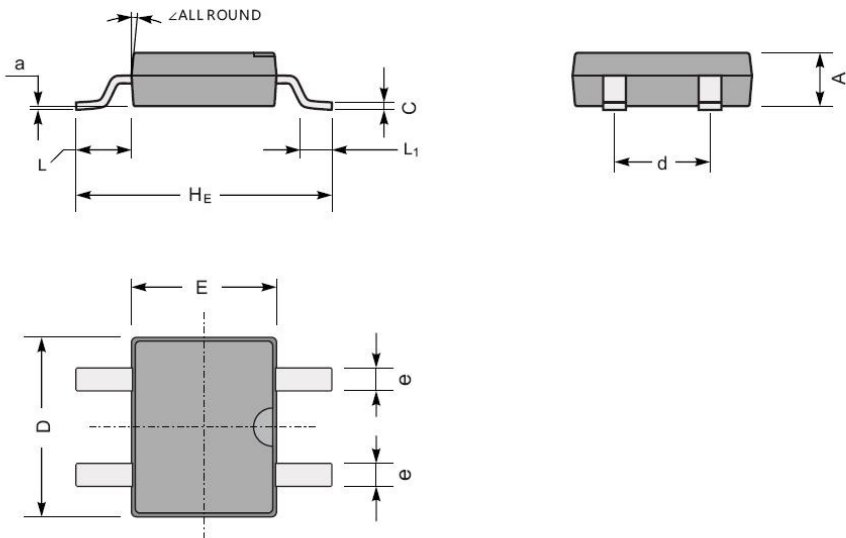
| 参数<br>Parameter                                           | 符号<br>Symbol | 测试条件<br>Test Conditions | 数值<br>Rating | 单位<br>Unit |
|-----------------------------------------------------------|--------------|-------------------------|--------------|------------|
| Max Instantaneous Forward Voltage                         | $V_F$        | $I_F=0.8A$              | 1.1          | V          |
| Maximum DC Reverse Current at Maximum DC Blocking Voltage | $I_R$        | $T_a=25^\circ C$        | 5.0          | μA         |
|                                                           |              | $T_a=125^\circ C$       | 40           | μA         |

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

MBF



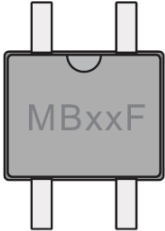
MBF mechanical data

| UNIT |     | A   | C    | D   | E   | H <sub>E</sub> | d   | e   | L   | L <sub>1</sub> | a   | $\angle$ |
|------|-----|-----|------|-----|-----|----------------|-----|-----|-----|----------------|-----|----------|
| mm   | max | 1.6 | 0.22 | 5.0 | 4.1 | 7.0            | 2.7 | 0.7 | 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 | 28  | 67  | 43             | 8   |          |
|      | min | 47  | 5.9  | 177 | 142 | 252            | 91  | 20  | 51  | 20             | —   |          |

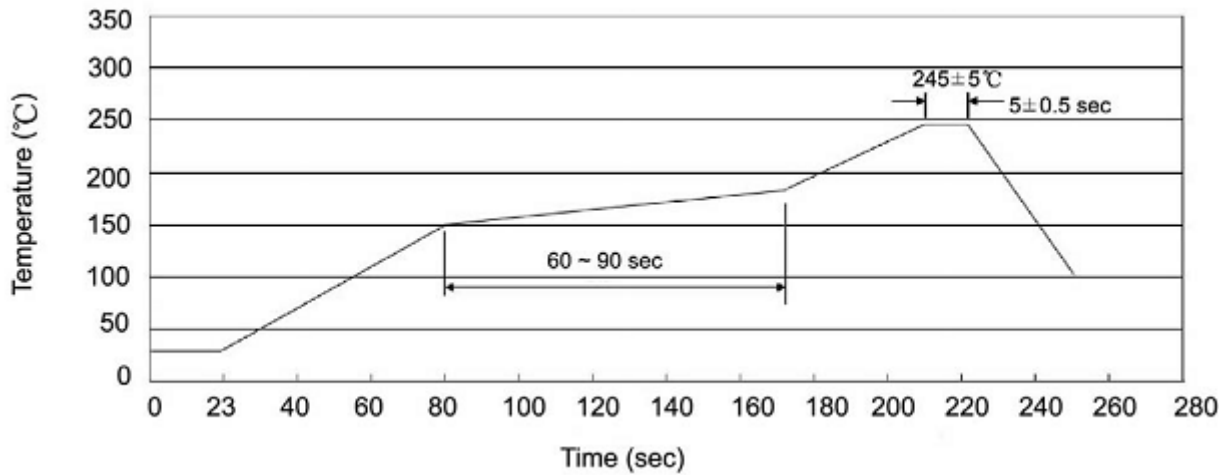
**印章说明 / Marking Instructions**

### Marking

| Type number | Marking code |
|-------------|--------------|
| MB1F        | MB1F         |
| MB2F        | MB2F         |
| MB4F        | MB4F         |
| MB6F        | MB6F         |
| MB8F        | MB8F         |
| MB10F       | MB10F        |



回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



- 说明：

  - 1、预热温度  $25 \sim 150^{\circ}\text{C}$ ，时间  $60 \sim 90\text{sec}$ ;
  - 2、峰值温度  $245 \pm 5^{\circ}\text{C}$ ，时间持续为  $5 \pm 0.5\text{sec}$ ;
  - 3、焊接制程冷却速度为  $2 \sim 10^{\circ}\text{C}/\text{sec}$ .
- Note:

  - 1.Preheating: $25 \sim 150^{\circ}\text{C}$ ，Time: $60 \sim 90\text{sec}$ .
  - 2.Peak Temp.: $245 \pm 5^{\circ}\text{C}$ ，Duration: $5 \pm 0.5\text{sec}$ .
  3. Cooling Speed:  $2 \sim 10^{\circ}\text{C}/\text{sec}$ .

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度： $260 \pm 5^{\circ}\text{C}$       时间： $10 \pm 1$  sec.      Temp.: $260 \pm 5^{\circ}\text{C}$       Time: $10 \pm 1$  sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

| Package Type<br>封装形式 | Units 包装数量         |                         |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Reel<br>只/卷盘 | Reels/Inner Box<br>卷盘/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Reel                                    | Inner Box 盒 | Outer Box 箱 |
| MBF                  | 5000               | 2                       | 10000                  | 5                            | 50000                  | 13" ×15                                 | 336X336X40  | 345X345X235 |

使用说明 / Notices