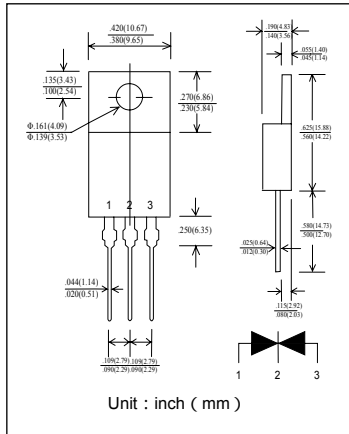




**肖特基二极管**  
**反向电压 30---60V**  
**正向电流(单管) 10.0 A**



**MBR2030 ..... MBR2060**

**Schottky Barrier Rectifier**

Reverse Voltage 30 to 60 V

Forward Current(Single) 10.0 A

**特征 Features**

- 大电流承受能力。High Current Capability
- 正向压降低。Low Forward Voltage Drop
- 低功耗高效率。Low Power Loss , High Efficiency

**机械数据 Mechanical Data**

- 封装: 塑料封装 Case: Molded Plastic
- 极性: 标记模压或印于本体 Polarity: Symbols molded or marked on body
- 安装位置: 任意 Mounting Position: Any
- 重量: 2.24 克 Weight: 2.24 Grams

**极限值和温度特性** TA = 25 除非另有规定。

**Maximum Ratings & Thermal Characteristics** Ratings at 25 ambient temperature unless otherwise specified.

|   | 符号<br>Symbols   | MBR<br>2030  | MBR<br>2035 | MBR<br>2040 | MBR<br>2045 | MBR<br>2050 | MBR<br>2060 | 单位<br>Unit |
|---|-----------------|--------------|-------------|-------------|-------------|-------------|-------------|------------|
| 最大可重复峰值反向电压<br>Maximum repetitive peak reverse voltage                          | $V_{RRM}$       | 30           | 35          | 40          | 45          | 50          | 60          | V          |
| 最大均方根电压<br>Maximum RMS voltage  | $V_{RMS}$       | 21           | 24.5        | 28          | 31.5        | 35          | 42          | V          |
| 最大直流阻断电压<br>Maximum DC blocking voltage   | $V_{DC}$        | 30           | 35          | 40          | 45          | 50          | 60          | V          |
| 最大正向平均整流电流<br>Maximum average forward rectified current                         | $I_{F(AV)}$     | 10           |             |             |             |             |             | A          |
| 峰值正向浪涌电流 8.3ms单一正弦半波<br>Peak forward surge current 8.3 ms single half sine-wave | $I_{FSM}$       | 150          |             |             |             |             |             | A          |
| 最大反向峰值电流 @TA = 75<br>Maximum peak reverse current full cycle                    | $I_{R(AV)}$     | 5            |             |             |             |             |             | mA         |
| 典型热阻 Typical thermal resistance   | $R_{\theta JA}$ | 30           |             |             |             |             |             | K/W        |
| 工作结温和存储温度<br>Operating junction and storage temperature range                   | $T_j, T_{STG}$  | -50 --- +150 |             |             |             |             |             |            |

**电特性** TA = 25 除非另有规定。

**Electrical Characteristics** Ratings at 25 ambient temperature unless otherwise specified.

|   | 符号<br>Symbols | MBR<br>2030                  | MBR<br>2035 | MBR<br>2040                   | MBR<br>2045 | MBR<br>2050       | MBR<br>2060 | 单位<br>Unit |    |
|---|---------------|------------------------------|-------------|-------------------------------|-------------|-------------------|-------------|------------|----|
| 最大正向电压<br>Maximum forward voltage                         | $V_F$         | $I_F = 10A T_C = 25$<br>0.84 |             | $I_F = 10A T_C = 125$<br>0.72 |             | 0.95<br>0.85      |             | V          |    |
| 最大反向电流<br>Maximum reverse current                         | $I_R$         | $T_A = 25$<br>3              |             |                               |             | $T_A = 125$<br>15 |             |            | mA |
| 典型结电容 $V_R = 4.0V, f = 1MHz$<br>Type junction capacitance | $C_j$         | 650                          |             |                               |             |                   |             | pF         |    |

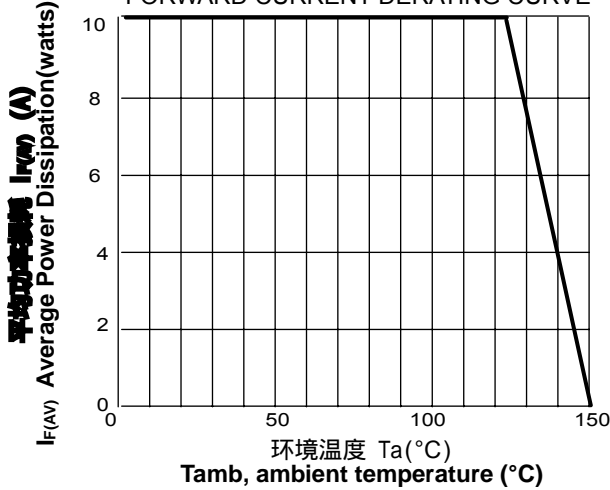


## 特性曲线

### Characteristic Curves

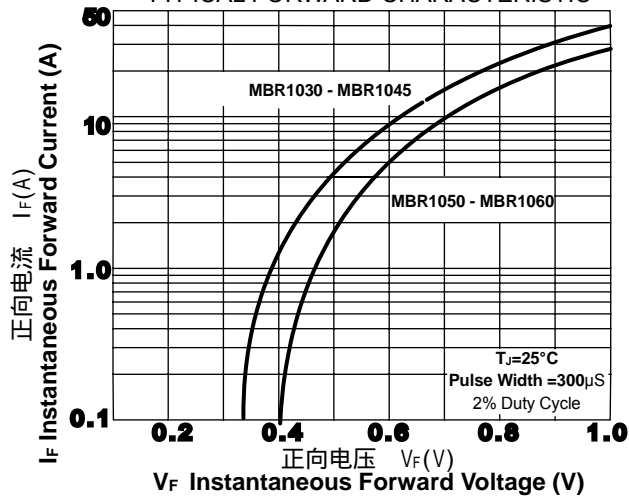
#### 正向电流降额曲线

FORWARD CURRENT DERATING CURVE



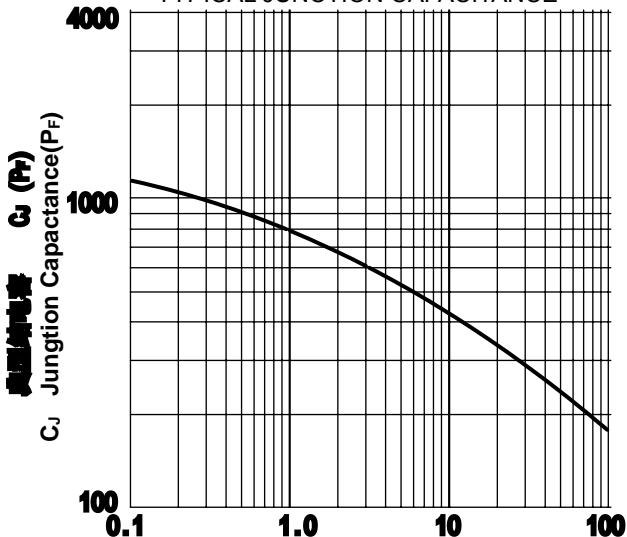
#### 正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



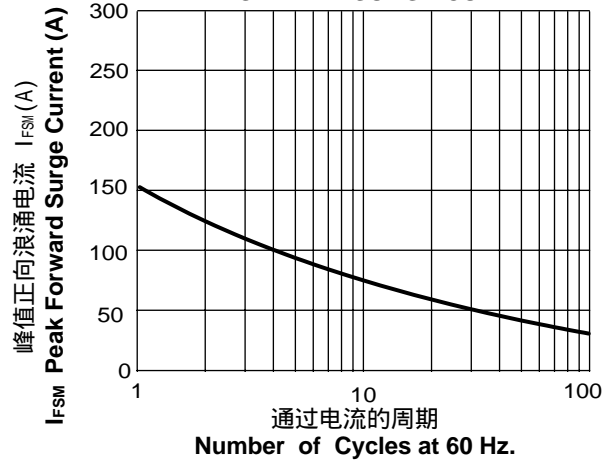
#### 典型结电容

TYPICAL JUNCTION CAPACITANCE



## MBR2030 ..... MBR2060

### 浪涌特性曲线 (最大值) MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



#### 反向特性曲线(典型值)

TYPICAL REVERSE CHARACTERISTICS

