

**描述 / Descriptions**

TO-220AC 塑封封装 肖特基二极管。

Schottky Barrier Diode in a TO-220AC Plastic Package.

**特征 / Features**

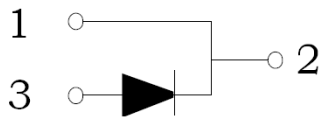
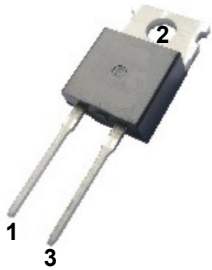
损耗低，效率高。

Low power loss, high efficiency .

**用途 / Applications**

用于高频、低压、大电流整流二极管、续流二极管、保护二极管。

For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

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

PIN1、2 : Cathode

PIN 3 : Anode

**放大及印章代码 /  $h_{FE}$  Classifications & Marking**

见印章说明。 See Marking Instructions

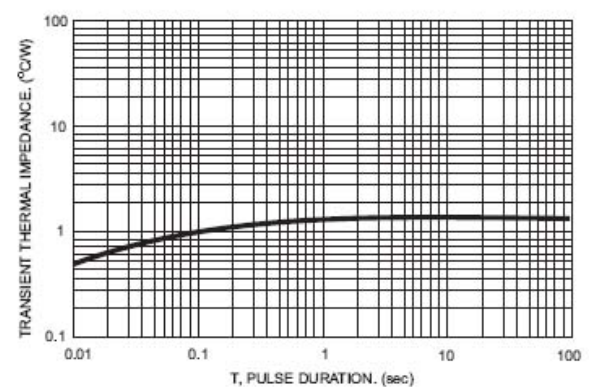
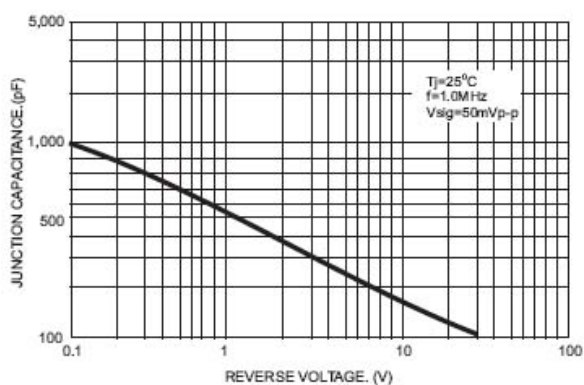
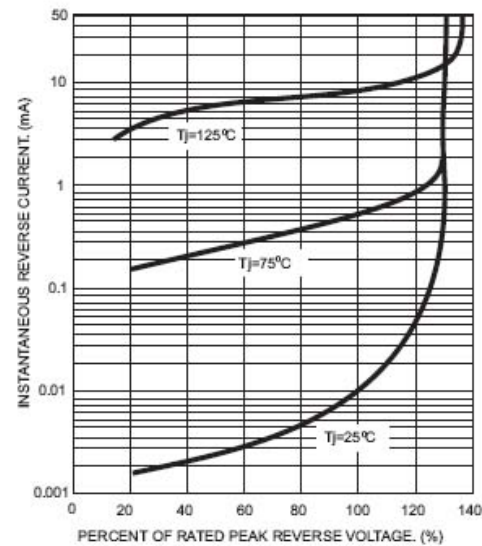
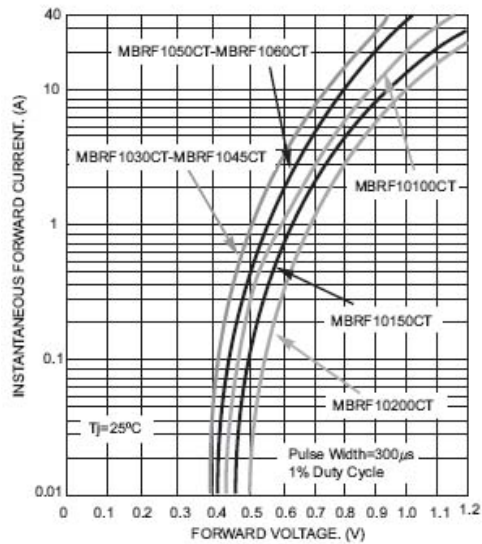
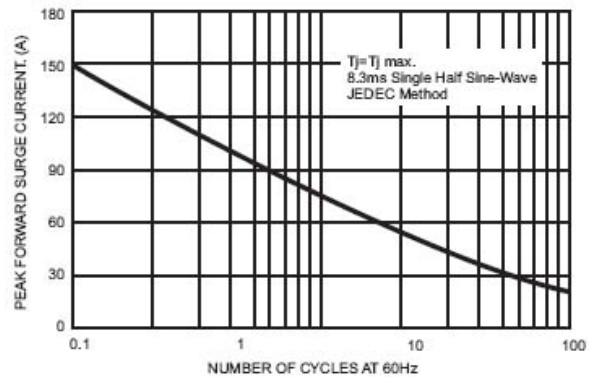
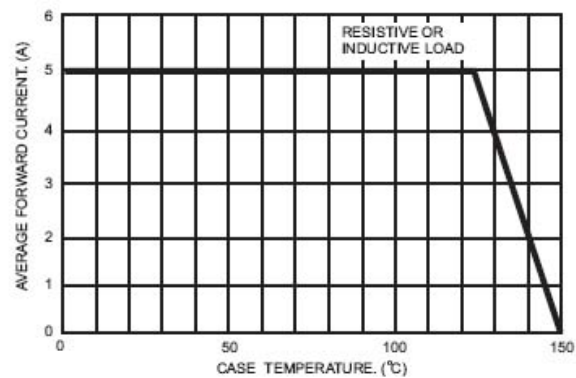
**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

| 参数<br>Parameter                             | 符号<br>Symbol    | 数值<br>Rating | 单位<br>Unit |
|---------------------------------------------|-----------------|--------------|------------|
| Peak Repetitive Reverse Voltage             | $V_{RRM}$       | 200          | V          |
| Average Forward Rectified Current           | $I_{F(AV)}$     | 10           | A          |
| Peak Repetitive Forward Current             | $I_{FRM}$       | 10           | A          |
| Peak Forward Surge Current                  | $I_{FSM}$       | 150          | A          |
| Peak Repetitive Reverse Surge Current       | $I_{RRM}$       | 0.5          | A          |
| Typical Thermal Resistance Junction to Case | $R_{\theta JC}$ | 2.5          | °C/W       |
| Junction Temperature Range                  | $T_J$           | 150          | °C         |
| Storage Temperature Range                   | $T_{stg}$       | -55~150      | °C         |

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

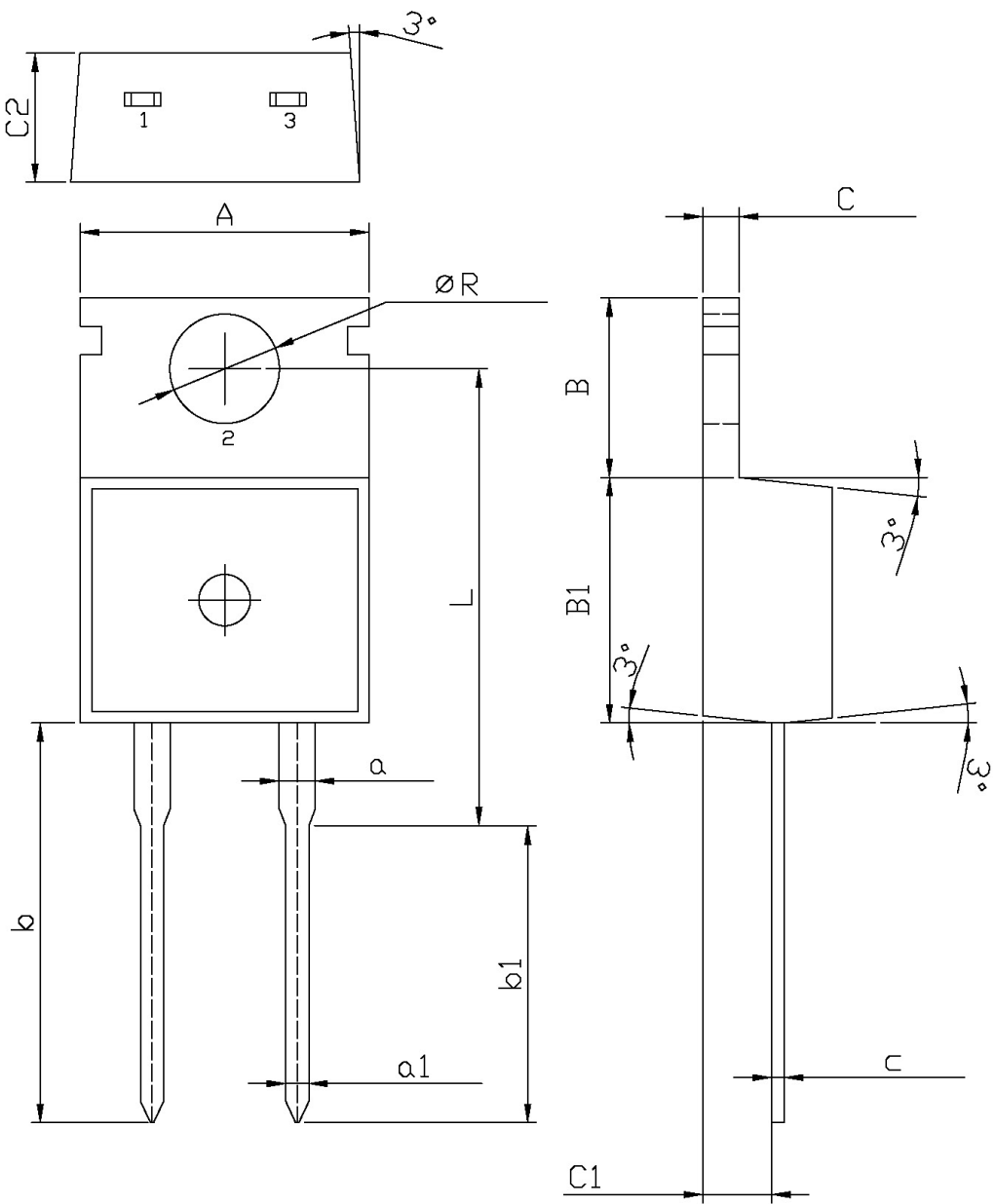
| 参数<br>Parameter               | 符号<br>Symbol | 测试条件<br>Test Conditions          | 最小值<br>Min | 典型值<br>Typ | 最大值<br>Max | 单位<br>Unit |
|-------------------------------|--------------|----------------------------------|------------|------------|------------|------------|
| Reverse Voltage               | $V_R$        |                                  | 200        |            |            | V          |
| Forward Voltage               | $V_F$        | $I_F=5.0A$                       |            |            | 0.99       | V          |
|                               |              | $I_F=5.0A \quad T_C=125^\circ C$ |            |            | 0.87       | V          |
| Instantaneous Reverse Current | $I_{RM}$     | $V_R=200V$                       |            |            | 0.15       | mA         |
|                               |              | $V_R=200V \quad T_C=125^\circ C$ |            |            | 150        | mA         |
| Voltage Rate of Change        | dv/dt        |                                  |            |            | 10000      | V/μs       |

**电参数曲线图 / Electrical Characteristic Curve**

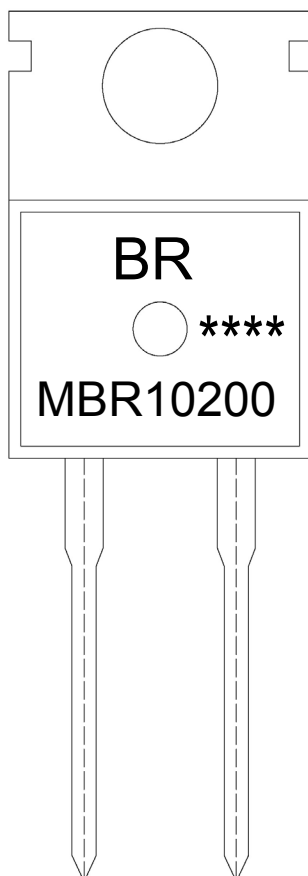


外形尺寸图 / Package Dimensions

TO-220AC Unit:mm



| Symbol | Dimensions In Millimeters |      | Symbol | Dimensions In Millimeters |     |
|--------|---------------------------|------|--------|---------------------------|-----|
|        | Min                       | Max  |        | Min                       | Max |
| A      | 9.8                       | 10.2 | B      | 6.3                       | 6.7 |
| R      | 3.56                      | 3.64 | B1     | 9.0                       | 9.4 |
| L      | 15.7                      | 16.1 | C1     | 2.2                       | 2.6 |
| b      | 12.6                      | 13.6 | C      | 1.2                       | 1.4 |
| b1     | 9.6                       | 10.6 | c      | 0.4                       | 0.6 |
| a      | 1.22                      | 1.32 | C2     | 4.3                       | 4.7 |
| a1     | 0.7                       | 0.9  |        |                           |     |

**印章说明 / Marking Instructions**

说明：

BR：为公司代码

MBR10200：为产品型号

\*\*\*\*：为生产批号代码，随生产批号变化。

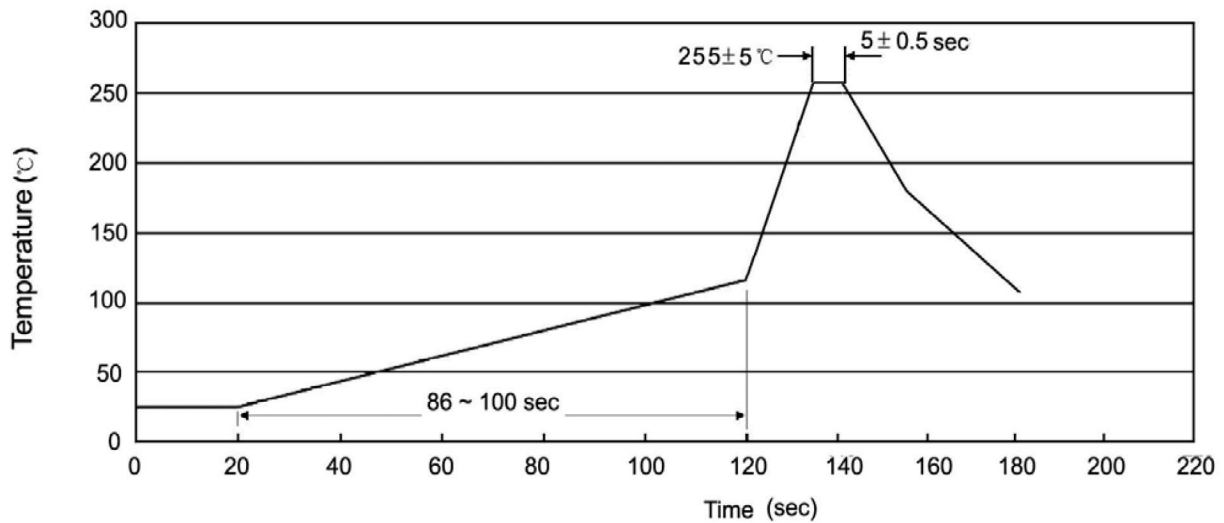
Note:

BR: Company Code

MBR10200：Product Type.

\*\*\*\*: Lot No. Code, code change with Lot No.

**波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)**



说明：

- 1、预热温度 25 ~ 150°C，时间 60 ~ 90sec;
- 2、峰值温度 255±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:255±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

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

温度：270±5°C

时间：10±1 sec.

Temp.:270±5°C

Time:10±1 sec

**包装规格 / Packaging SPEC.**

散件包装 / BULK

| Package Type<br>封装形式 | Units 包装数量       |                       |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|------------------|-----------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Bag<br>只/袋 | Bags/Inner Box<br>袋/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Bag 袋                                   | Inner Box 盒 | Outer Box 箱 |
| TO-220/F/AC          | 200              | 10                    | 2,000                  | 5                            | 10,000                 | 135×190                                 | 237×172×102 | 560×245×195 |

套管包装 / TUBE

| Package Type<br>封装形式 | Units 包装数量         |                         |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Tube<br>只/套管 | Tubes/Inner Box<br>套管/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Tube 套管                                 | Inner Box 盒 | Outer Box 箱 |
| TO-220/F/AC          | 50                 | 20                      | 1,000                  | 5                            | 5,000                  | 532×31.4×5.5                            | 555×164×50  | 575×290×180 |

**使用说明 / Notices**