

### 描述 / Descriptions

TO-220 塑料封装 肖特基二极管。TO-220 Plastic Package Schottky Diode.

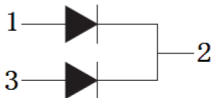
### 特征 / Features

低功耗，高效率、良好的高温特性、有过压保护环，高可靠性、环保（RoHS）产品。  
Low power loss, high efficiency、High Operating Junction Temperature、Guard ring for overvoltage protection, High reliability、RoHS product

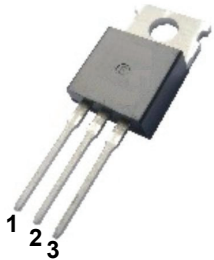
### 用途 / Applications

高频开关电源、低压续流电路和保护电路。  
High frequency switch power supply、Free wheeling diodes, polarity protection applications

### 内部等效电路 / Equivalent Circuit



### 引脚排列 / Pinning



PIN1 : Anode      PIN 2 : Cathode      PIN 3 : Anode

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

见印章说明。See Marking Instructions

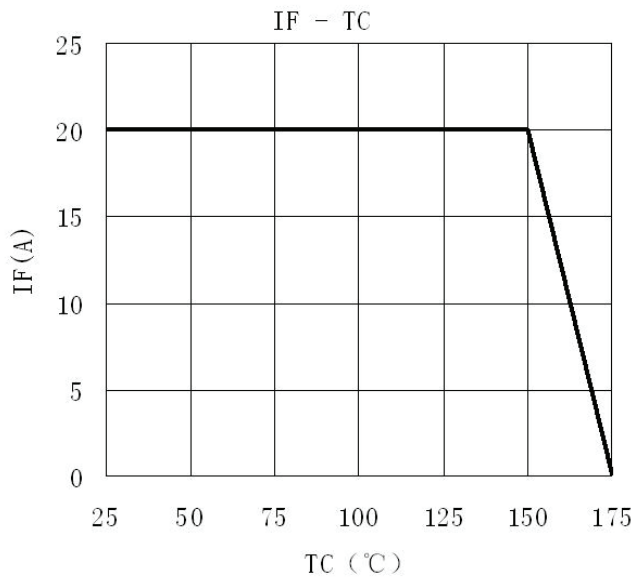
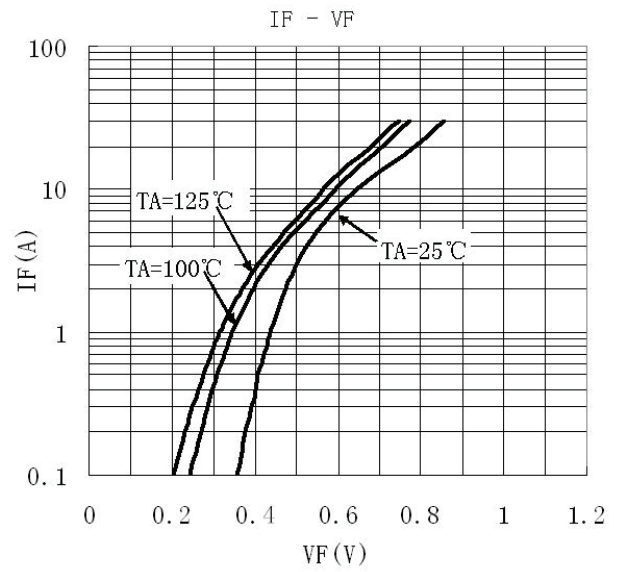
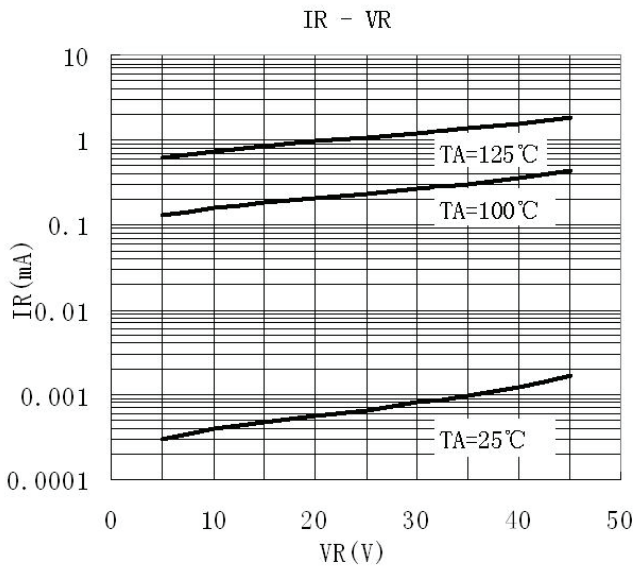
**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	45	V
DC Blocking Voltage	$V_{DC}$	45	V
Average Rectified Forward Current $T_C=150^\circ\text{C}$	$I_{F(AV)}$	$2 \times 10$	A
Non Repetitive Peak Surge Current	$I_{FSM}$	150	A
Maximum Thermal Resistance Junction to Case	$R_{\theta Jc}$	2.7	$^\circ\text{C}/\text{W}$
Maximum junction temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-40~150	$^\circ\text{C}$

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

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Maximum Instantaneous Forward Voltage	$V_F$	$T_j=25^\circ\text{C}$ $I_F=10\text{A}$		0.63	0.7	V
		$T_j=125^\circ\text{C}$ $I_F=10\text{A}$		0.56	0.6	V
Maximum Instantaneous Reverse Current	$I_R$	$T_j=25^\circ\text{C}$ $V_R=V_{RRM}$			20	$\mu\text{A}$
		$T_j=125^\circ\text{C}$ $V_R=V_{RRM}$			20	mA

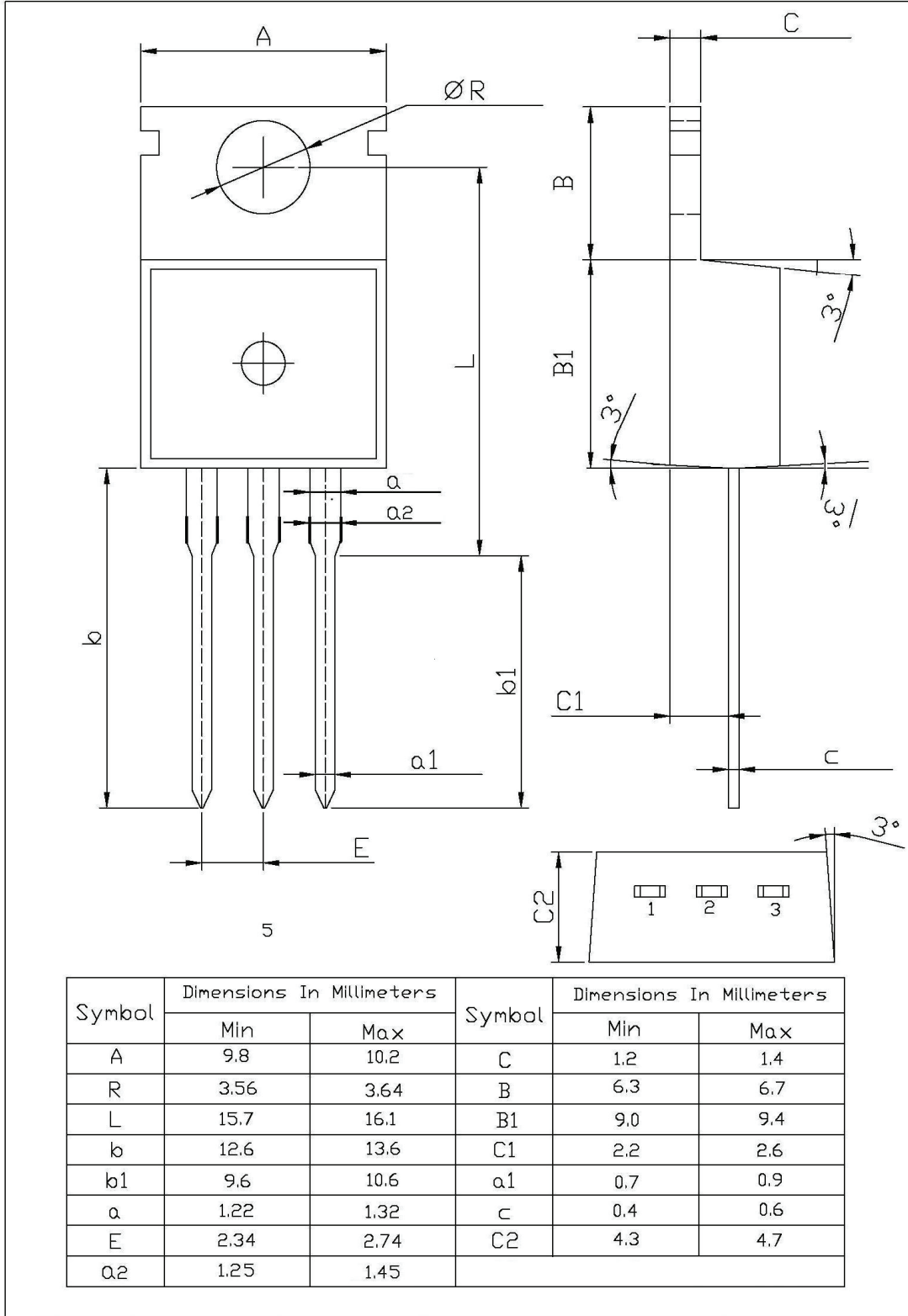
**电参数曲线图 / Electrical Characteristic Curve**



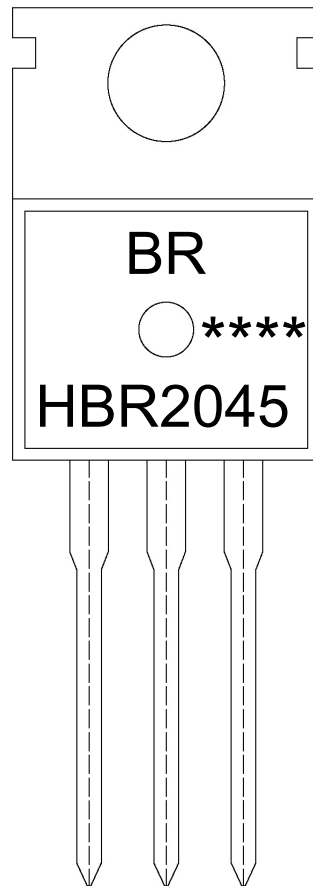
外形尺寸图 / Package Dimensions

TO-220

单位: mm



印章说明 / Marking Instructions



说明：

BR： 为公司代码

HBR2045： 为产品型号

\*\*\*\*： 为生产批号代码，随生产批号变化。

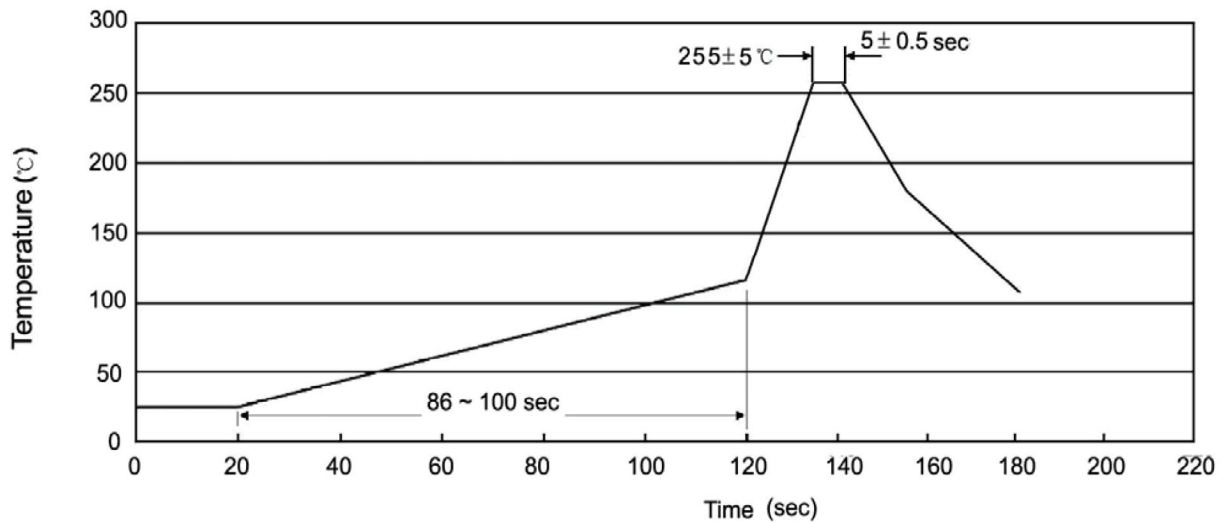
Note:

BR: Company Code

HBR2045: 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

套管包装 / TUBE

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

**使用说明 / Notices**