

**描述 / Descriptions**

TO-92(R)塑封封装 PNP 半导体三极管。Silicon PNP transistor in a TO-92(R) Plastic Package.

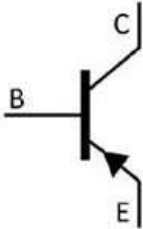
**特征 / Features**

大电流,与 BC337 互补。  
High current, complementary pair with BC337.

**用途 / Applications**

一般放大及开关线路。  
General purpose application and switching.

**内部等效电路 / Equivalent Circuit**



**引脚排列 / Pinning**



PIN1 : Emitter      PIN 2 : Base      PIN 3 : Collector

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

|                                    |         |         |         |
|------------------------------------|---------|---------|---------|
| $h_{FE}$ Classifications<br>Symbol | 16      | 25      | 40      |
| $h_{FE}$ Range                     | 100~250 | 160~400 | 250~600 |

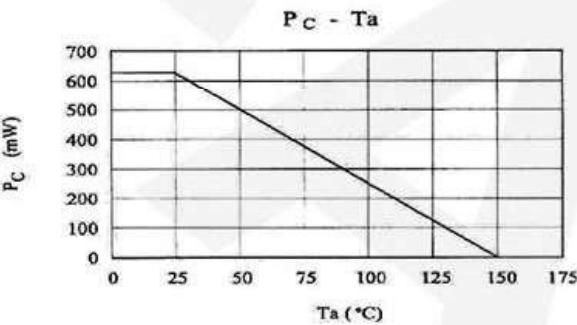
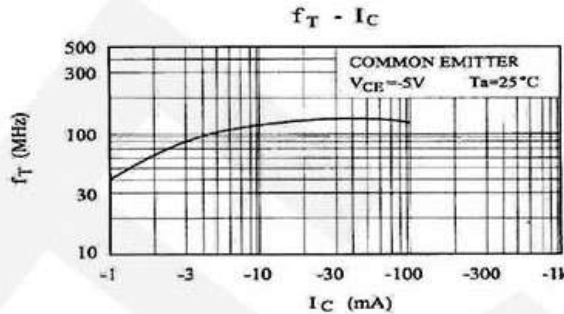
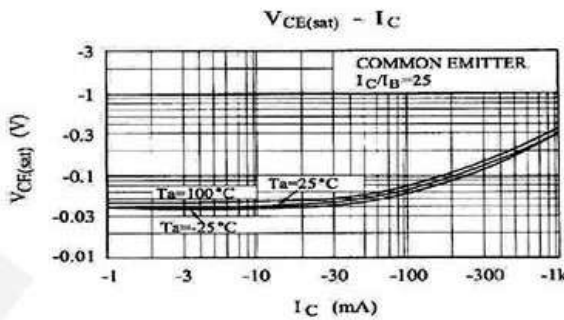
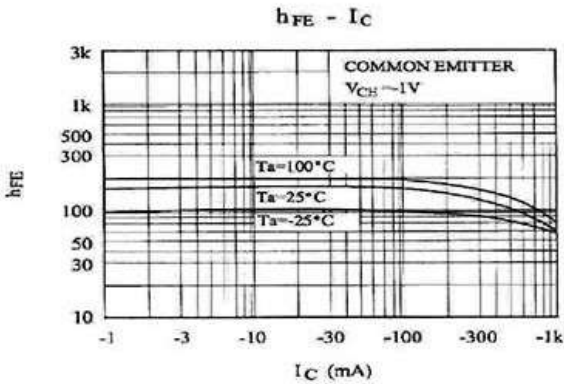
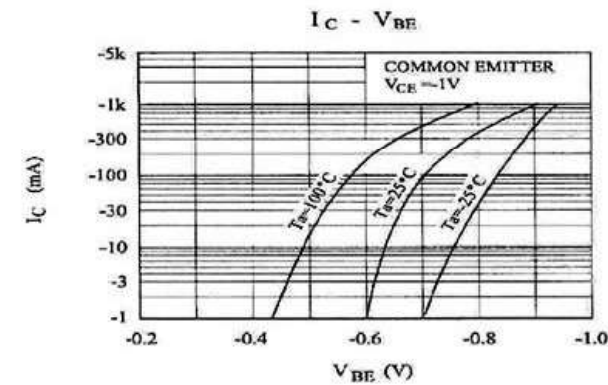
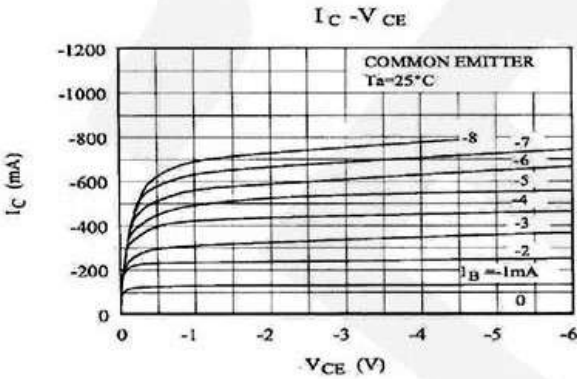
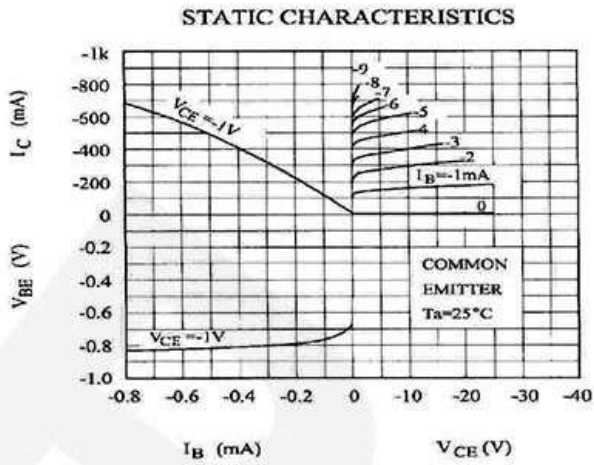
极限参数 / Absolute Maximum Ratings(Ta=25°C)

| 参数<br>Parameter                | 符号<br>Symbol     | 数值<br>Rating | 单位<br>Unit |
|--------------------------------|------------------|--------------|------------|
| Collector to Base Voltage      | V <sub>CBO</sub> | -50          | V          |
| Collector to Emitter Voltage   | V <sub>CEO</sub> | -45          | V          |
| Emitter to Base Voltage        | V <sub>EBO</sub> | -5.0         | V          |
| Collector Current - Continuous | I <sub>C</sub>   | -800         | mA         |
| Emitter Current - Continuous   | I <sub>E</sub>   | 800          | mA         |
| Collector Power Dissipation    | P <sub>C</sub>   | 625          | mW         |
| Junction Temperature           | T <sub>j</sub>   | 150          | °C         |
| Storage Temperature Range      | T <sub>stg</sub> | -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 |
|-----------------------------------------|----------------------|----------------------------------------------------------|------------|------------|------------|------------|
| Collector Cut-Off Current               | I <sub>CBO</sub>     | V <sub>CB</sub> =-45V I <sub>E</sub> =0                  |            |            | -0.1       | μA         |
| DC Current Gain                         | h <sub>FE</sub>      | V <sub>CE</sub> =-1.0V I <sub>C</sub> =-100mA            | 100        |            | 600        |            |
| Collector to Emitter Saturation Voltage | V <sub>CE(sat)</sub> | I <sub>C</sub> =-500mA I <sub>B</sub> =-50mA             |            |            | -0.7       | V          |
| Base to Emitter On Voltage              | V <sub>BE(ON)</sub>  | V <sub>CE</sub> =-1.0V I <sub>C</sub> =-300mA            |            |            | -1.2       | V          |
| Base to Emitter Saturation Voltage      | f <sub>T</sub>       | V <sub>CE</sub> =-5.0V I <sub>C</sub> =-10mA<br>f=100MHz |            | 100        |            | MHz        |
| Transition Frequency                    | C <sub>ob</sub>      | V <sub>CB</sub> =-10V f=1.0MHz                           |            | 16         |            | pF         |

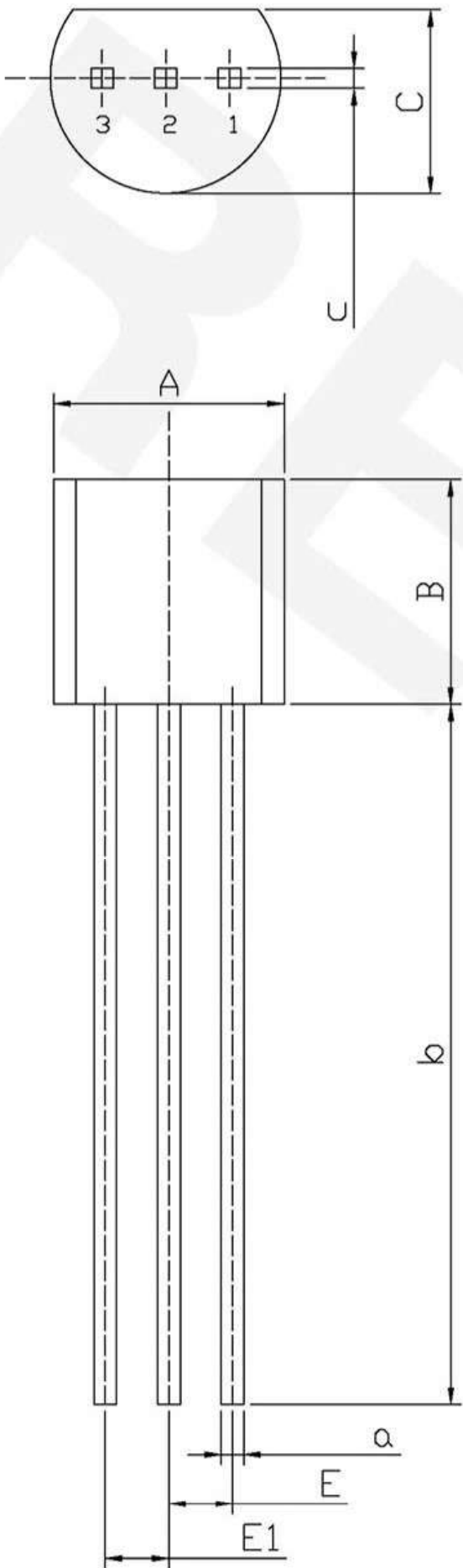
电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

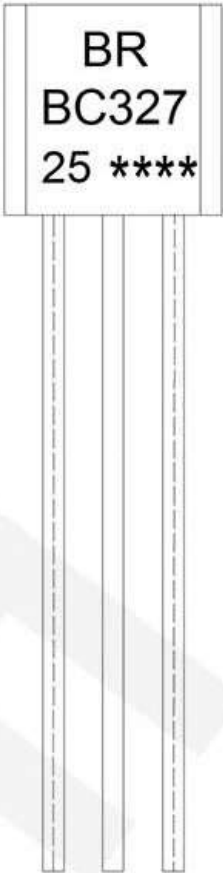
TO-92(R)

Unit: mm



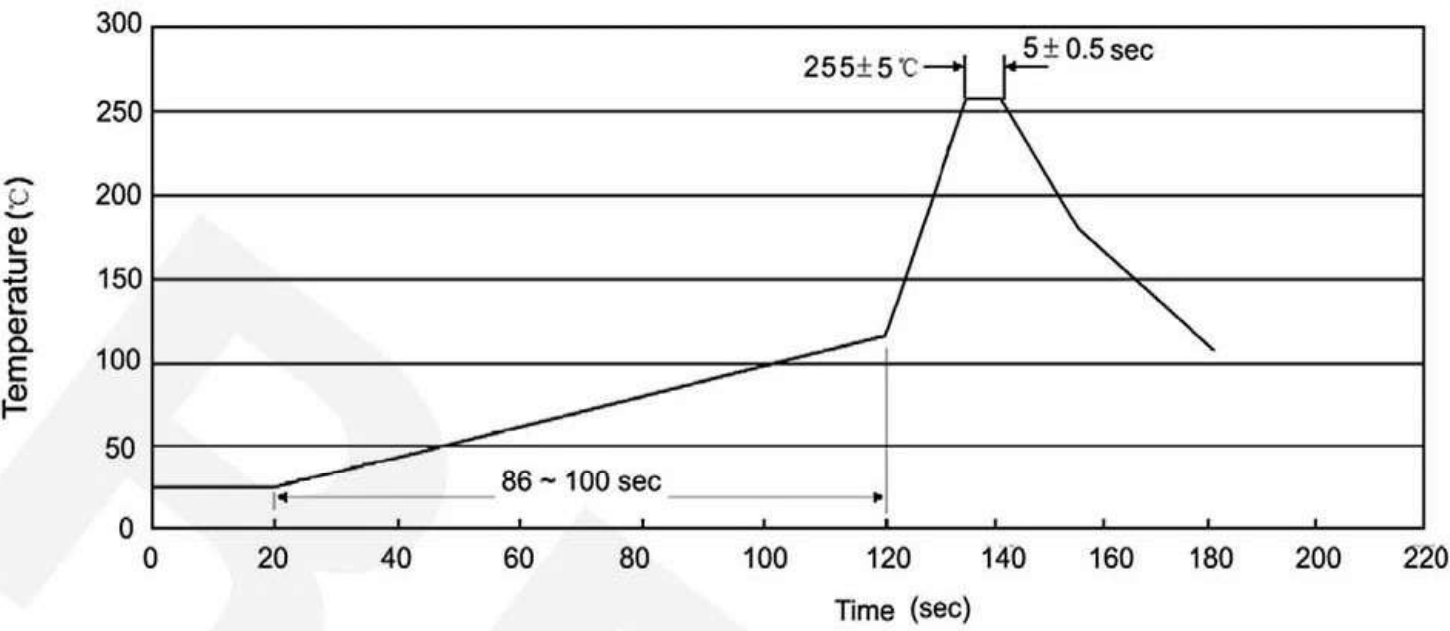
| Symbol | Dimensions In Millimeters |      |
|--------|---------------------------|------|
|        | Min                       | Max  |
| A      | 4.4                       | 4.8  |
| B      | 4.3                       | 4.7  |
| b      | 13                        | 15   |
| a      | 0.40                      | 0.60 |
| E      | 1.22                      | 1.32 |
| E1     | 1.22                      | 1.32 |
| C      | 3.4                       | 3.8  |
| c      | 0.30                      | 0.50 |

印章说明 / Marking Instructions



- 说明：
- BR： 为公司代码
- BC327： 为产品型号
- 25: 为  $h_{FE}$  分档代码
- \*\*\*\*： 为生产批号代码，随生产批号变化。
- Note:
- BR: Company Code.
- BC327: Product Type.
- 25:  $h_{FE}$  Classifications Symbol
- \*\*\*\*: 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: mm3) |             |             |
|----------------------|------------------|-----------------------|------------------------|------------------------------|------------------------|----------------------------|-------------|-------------|
|                      | 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-92                | 1,000            | 10                    | 10,000                 | 5                            | 50,000                 | 135×190                    | 237×172×102 | 560×245×195 |
|                      | 1,000            | 10                    | 10,000                 | 10                           | 100,000                | 135×190                    | 237×172×102 | 560×245×375 |

编带包装 / AMMO

| Package Type<br>封装形式 | Units 包装数量         |                        |                         |                              |                        | Dimension 包装尺寸 (unit: mm3) |                                   |
|----------------------|--------------------|------------------------|-------------------------|------------------------------|------------------------|----------------------------|-----------------------------------|
|                      | Units/tape<br>只/纸带 | Tape/Inner Box<br>纸带/盒 | Rows/Inner Box<br>纸带层/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Inner Box 盒                | Outer Box 箱                       |
| TO-92                | 3,000              | 1                      | 120                     | 10                           | 30,000                 | 328×230×42                 | 小箱 480×346×235,<br>大箱 547×407×268 |

使用说明 / Notices