

## / Descriptions

Silicon PNP transistor in a TO-220F Plastic Package.

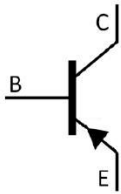
## / Features

High  $f_T$ , complementary pair with 2SC5171.

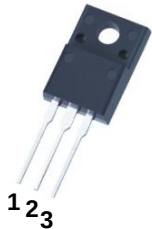
## / Applications

General power and driver stage amplifier applications.

## / Equivalent Circuit



## / Pinning



PIN1 Base      PIN 2 Collector      PIN 3 Emitter

## / $h_{FE}$ Classifications & Marking

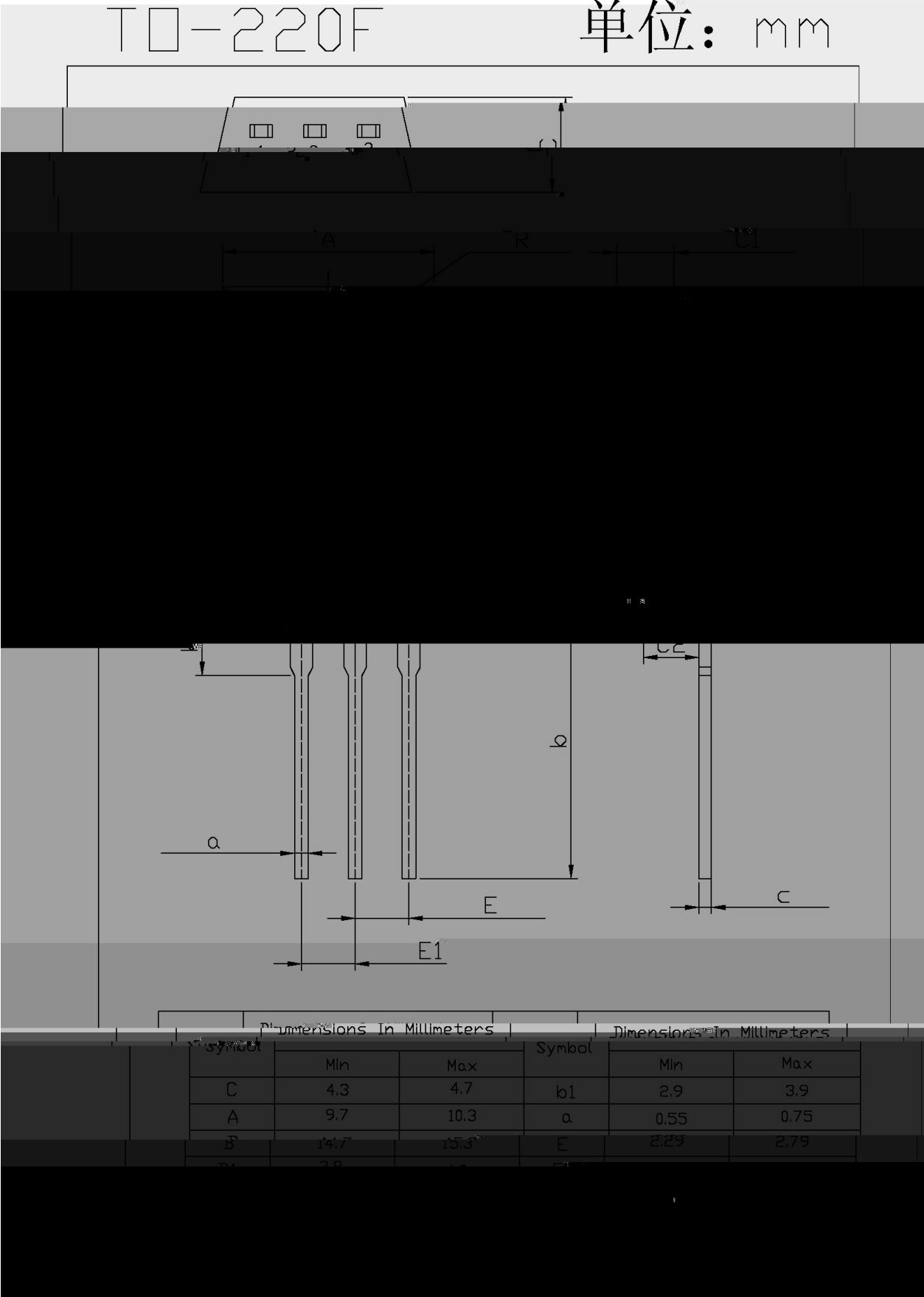
See Marking Instructions.

| Parameter                      | Symbol                 | Rating  | Unit        |
|--------------------------------|------------------------|---------|-------------|
| Collector to Base Voltage      | $V_{CBO}$              | -180    | V           |
| Collector to Emitter Voltage   | $V_{CEO}$              | -180    | V           |
| Emitter to Base Voltage        | $V_{EBO}$              | -5.0    | V           |
| Collector Current - Continuous | $I_C$                  | -2.0    | A           |
| Base Current                   | $I_B$                  | -1.0    | A           |
| Collector Power Dissipation    | $P_C$                  | 2.0     | W           |
| Collector Power Dissipation    | $P_C(T_c=25^{\circ}C)$ | 20      | W           |
| Junction Temperature           | $T_j$                  | 150     | $^{\circ}C$ |
| Storage Temperature Range      | $T_{stg}$              | -55 150 | $^{\circ}C$ |

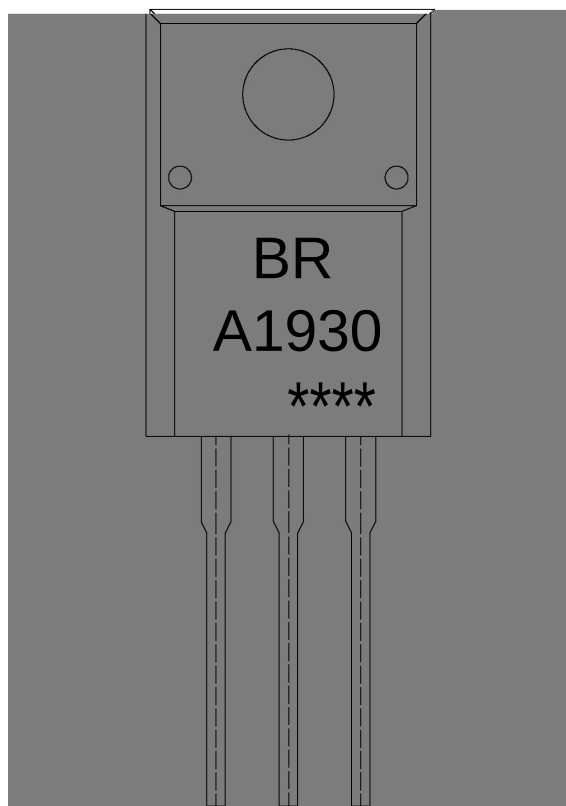
| Parameter                               | Symbol        | Test Conditions             | Min  | Typ | Max  | Unit    |
|-----------------------------------------|---------------|-----------------------------|------|-----|------|---------|
| Collector-Emitter Breakdown Voltage     | $V_{CEO}$     | $I_C=-10mA$ $I_B=0$         | -180 |     |      | V       |
| Collector Cut-Off Current               | $I_{CBO}$     | $V_{CB}=-180V$ $I_E=0$      |      |     | -5.0 | $\mu A$ |
| Emitter Cut-Off Current                 | $I_{EBO}$     | $V_{EB}=-5.0V$ $I_C=0$      |      |     | -5.0 | $\mu A$ |
| DC Current Gain                         | $h_{FE(1)}$   | $V_{CE}=-5.0V$ $I_C=-100mA$ | 100  |     | 320  |         |
|                                         | $h_{FE(2)}$   | $V_{CE}=-5.0V$ $I_C=-1.0A$  | 50   |     |      |         |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-1.0A$ $I_B$           |      |     |      |         |



/ Package Dimensions



/ Marking Instructions



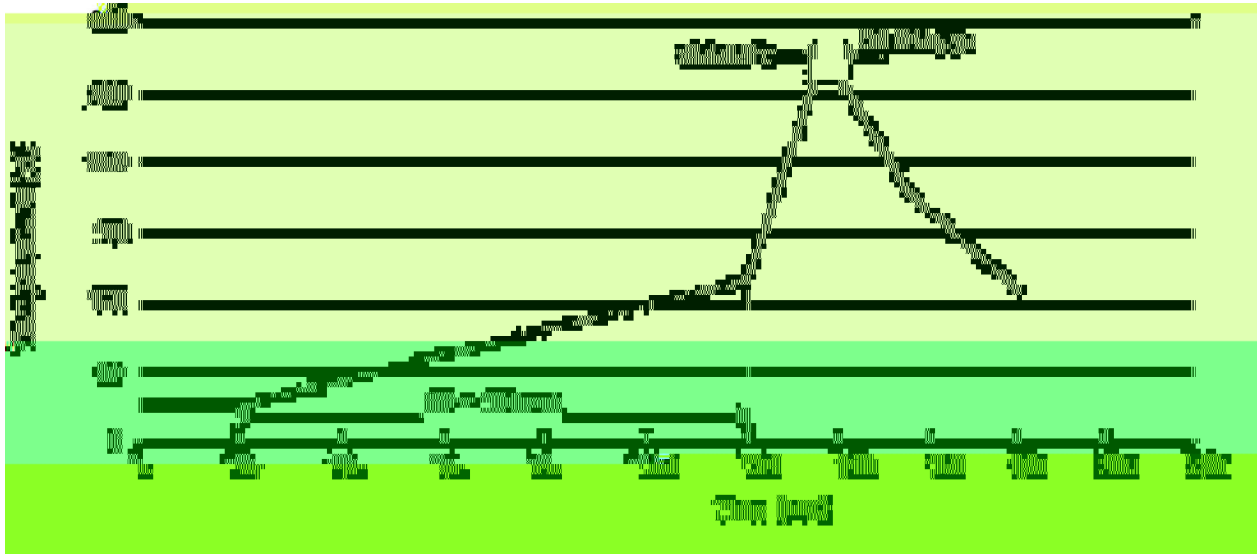
Note:

BR: Company Code.

A1930: Product Type.

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

( ) / Temperature Profile for Dip Soldering(Pb-Free)



Note:

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

/ Resistance to Soldering Heat Test Conditions

270 5                      10 1 sec.                      Temp.:270±5℃                      Time:10±1 sec

/ Packaging SPEC.

/ 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             | 200              | 10                    | 2,000                  | 5                            | 10,000                 | 135×190                                 | 237×172×102 | 560×245×195 |

/ 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             | 50                 | 20                      | 1,000                  | 5                            | 5,000                  | 532×31.4×5.5                            | 555×164×50  | 575×290×180 |

/ Notices