

### / Descriptions

Silicon PNP transistor in a TO-3P Plastic Package.

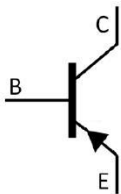
### / Features

For 45-50W audio frequency amplifier output stage, Complementary to 2SD718.

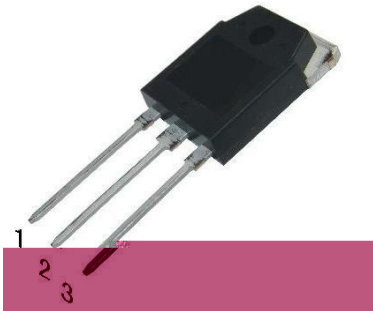
### / Applications

Designed for use in audio frequency amplifier.

### / Equivalent Circuit



### / Pinning



PIN1 Base      PIN 2 Collector      PIN 3 Emitter

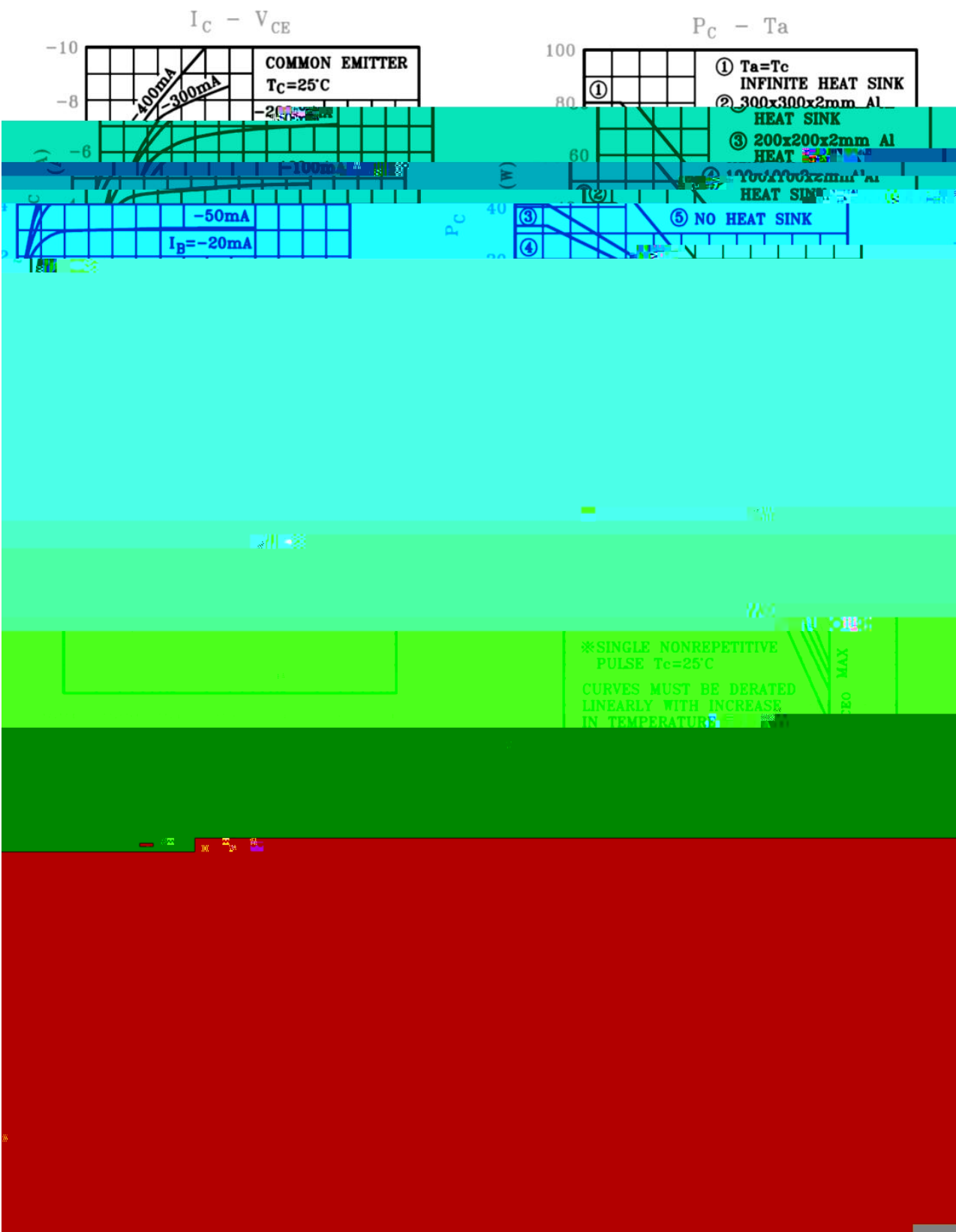
### / $h_{FE}$ Classifications & Marking

|                                    |        |        |
|------------------------------------|--------|--------|
| $h_{FE}$ Classifications<br>Symbol | R      | O      |
| $h_{FE}$ Range                     | 55~110 | 80~160 |

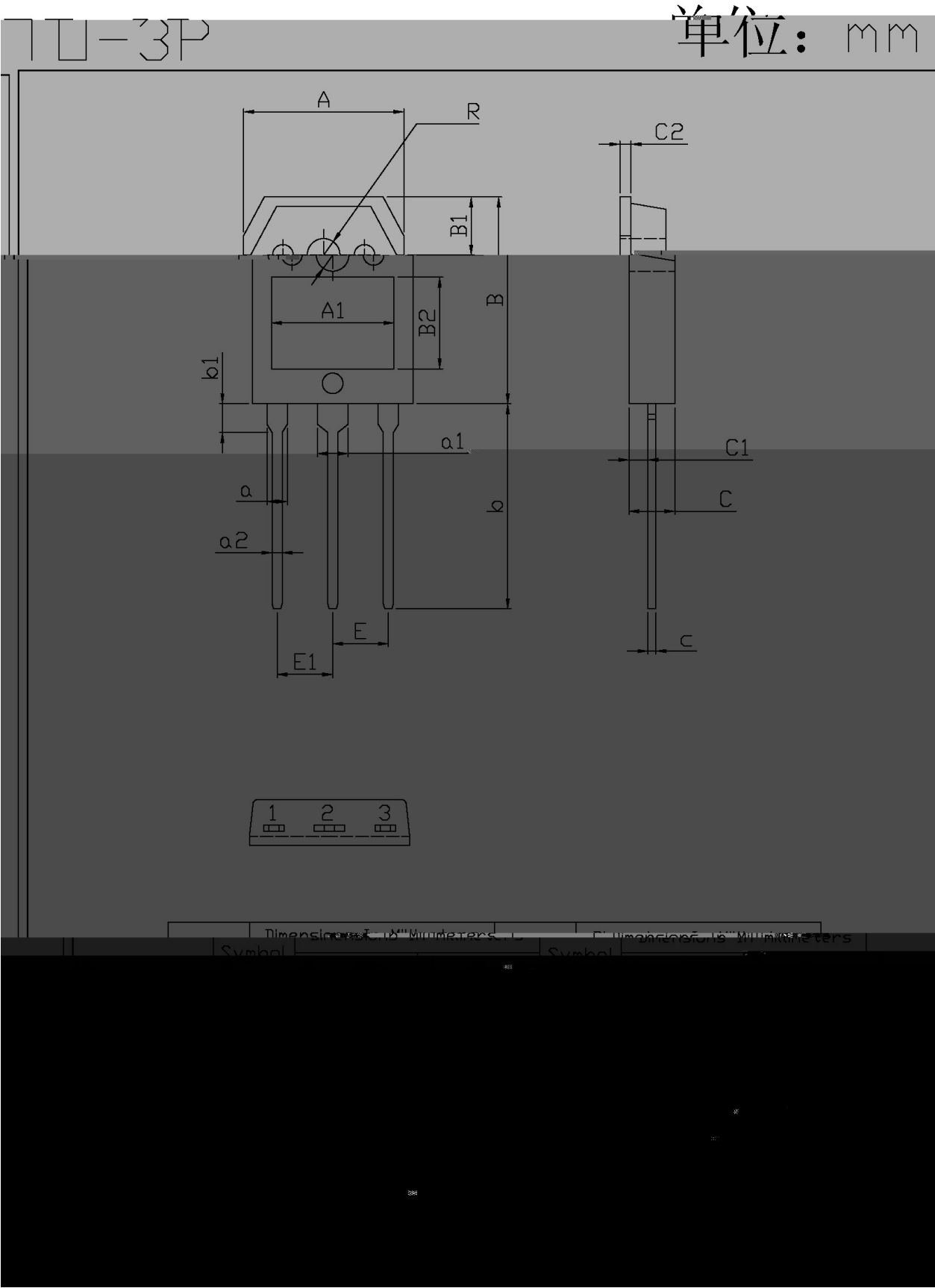
| Parameter                      | Symbol                 | Rating  | Unit        |
|--------------------------------|------------------------|---------|-------------|
| Collector to Base Voltage      | $V_{CBO}$              | -120    | V           |
| Collector to Emitter Voltage   | $V_{CEO}$              | -120    | V           |
| Emitter to Base Voltage        | $V_{EBO}$              | -5      | V           |
| Collector Current - Continuous | $I_C$                  | -10     | A           |
| Base Current                   | $I_B$                  | -1      | A           |
| Collector Power Dissipation    | $P_C(T_C=25^{\circ}C)$ | 80      | 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 to Emitter Breakdown Voltage  | $V_{CEO}$     | $I_C=-50mA$ $I_B=0$        | -120 |     |      | V       |
| Collector Cut-Off Current               | $I_{CBO}$     | $V_{CB}=-120V$ $I_E=0$     |      |     | -10  | $\mu A$ |
| Emitter Cut-Off Current                 | $I_{EBO}$     | $V_{EB}=-5.0V$ $I_C=0$     |      |     | -10  | $\mu A$ |
| DC Current Gain                         | $h_{FE}$      | $V_{CE}=-5.0V$ $I_C=-1.0A$ | 55   |     | 160  |         |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-5.0A$ $I_B=-0.5A$    |      |     | -2.5 | V       |
| Base to Emitter Voltage                 | $V_{BE}$      | $V_{CE}=-5.0V$ $I_C=-5.0A$ |      |     | -1.5 | V       |

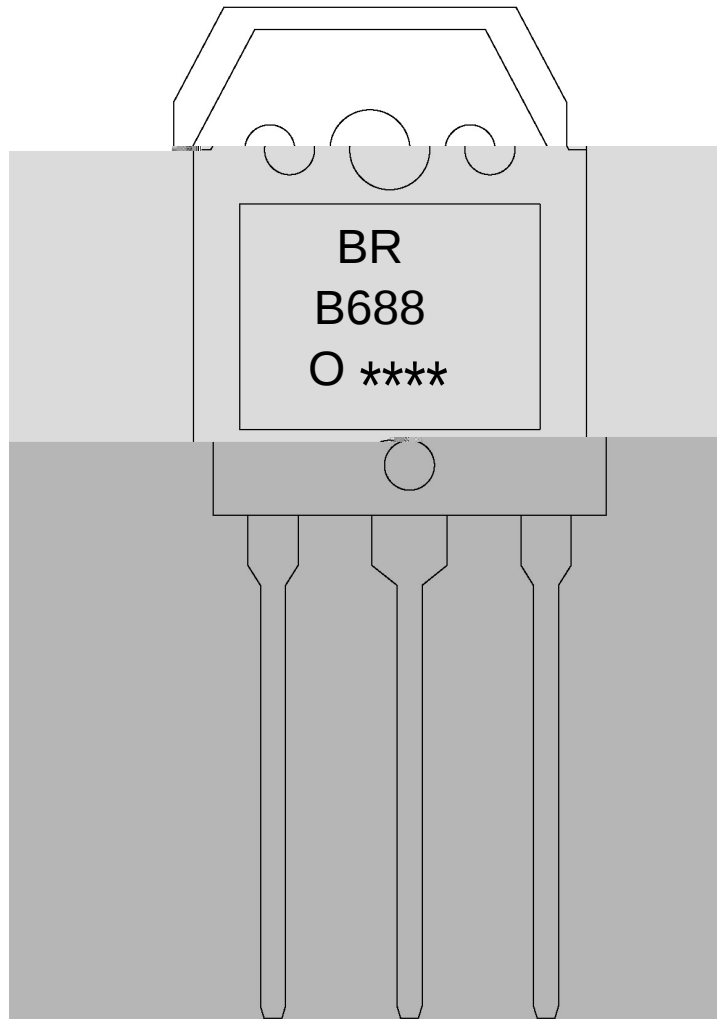
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



$h_{FE}$

Note:

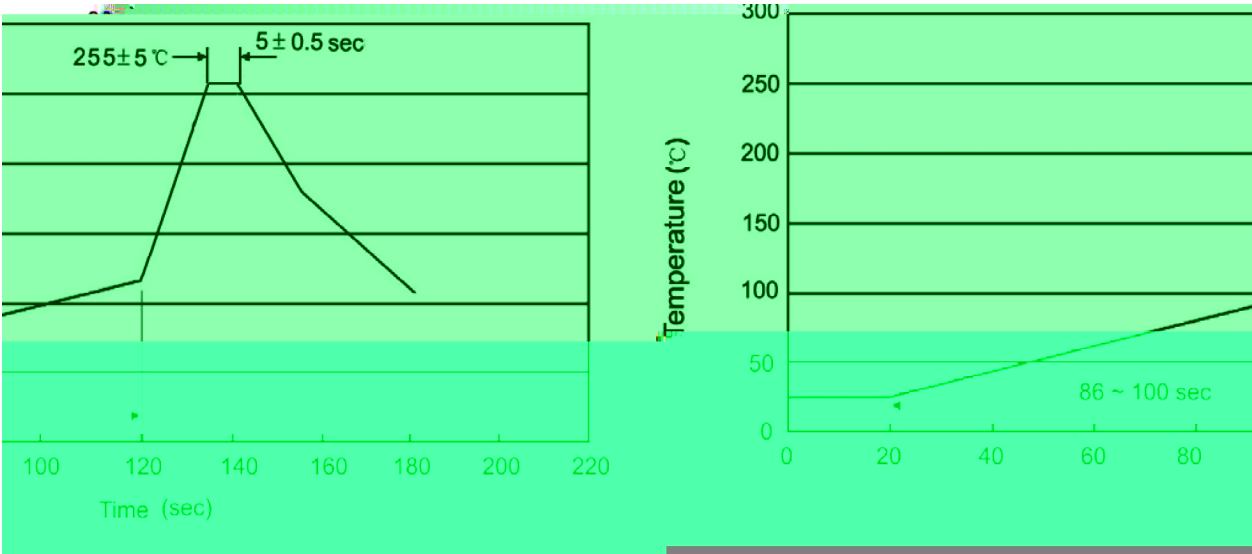
BR: Company Code.

B688: Product Type.

O:  $h_{FE}$  Classifications Symbol.

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

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



- Note:
- 1.Preheating:25~150    , Time:60~90sec.
  - 2.Peak Temp.:255    5    , Duration:5    0.5sec.
  - 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.

/ 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-3P                | 30                 | 15                      | 450                    | 5                            | 2250                   | 497.5×46×8                              | 555×164×50  | 575×290×180 |