

## / Descriptions

Silicon NPN transistor in a TO-126F Plastic Package.

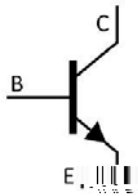
## / Features

High voltage, small collector output, capacitance.

## / Applications

High voltage switching and amplifier applications, color TV chroma output applications and, color TV horizontal driver.

## / Equivalent Circuit



## / Pinning



PIN1 Emitter      PIN 2 Collector      PIN 3 Base

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

- See Marking Instructions.

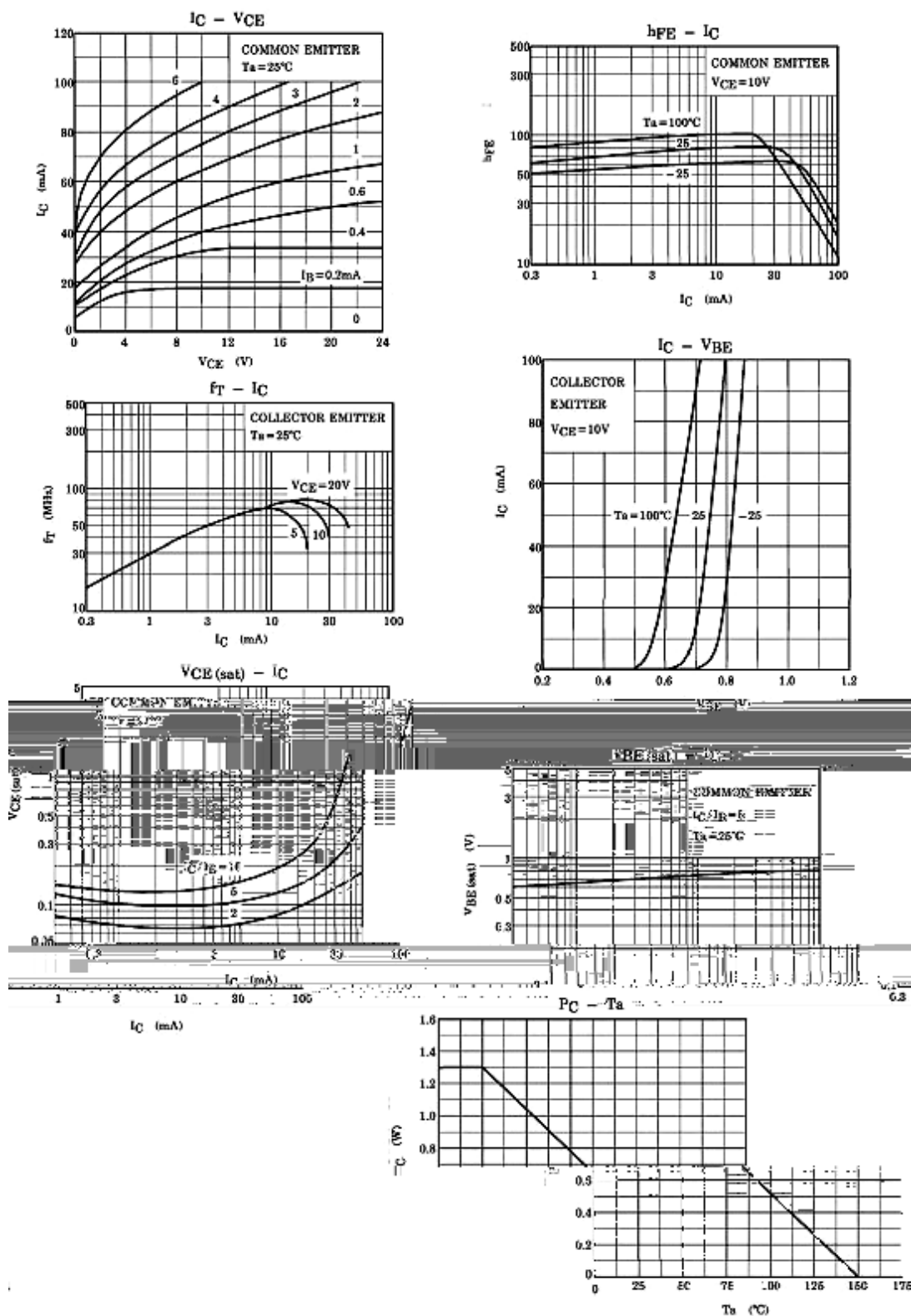
**/ Absolute Maximum Ratings(Ta=25 )**

| Parameter                      | Symbol    | Rating  | Unit |
|--------------------------------|-----------|---------|------|
| Collector to Base Voltage      | $V_{CBO}$ | 300     | V    |
| Collector to Emitter Voltage   | $V_{CEO}$ | 300     | V    |
| Emitter to Base Voltage        | $V_{EBO}$ | 7.0     | V    |
| Collector Current - Continuous | $I_C$     | 100     | mA   |
| Base Current- Continuous       | $I_B$     | 50      | mA   |
| Collector Power Dissipation    | $P_C$     | 1.3     | W    |
| Junction Temperature           | $T_j$     | 150     |      |
| Storage Temperature Range      | $T_{stg}$ | -55~150 |      |

**/ Electrical Characteristics(Ta=25 )**

| Parameter                               | Symbol        | Test Conditions                 | Min | Typ | Max | Unit |
|-----------------------------------------|---------------|---------------------------------|-----|-----|-----|------|
| Collector Cut-Off Current               | $I_{CBO}$     | $V_{CB}=240V$ $I_E=0$           |     |     | 1.0 | A    |
| Emitter Cut-Off Current                 | $I_{EBO}$     | $V_{EB}=7.0V$ $I_C=0$           |     |     | 1.0 | A    |
| DC Current Gain                         | $h_{FE(1)}$   | $V_{CE}=10V$ $I_C=20mA$         | 30  |     | 200 |      |
|                                         | $h_{FE(2)}$   | $V_{CE}=10V$ $I_C=4.0mA$        | 20  |     |     |      |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=10mA$ $I_B=1.0mA$          |     |     | 1.0 | V    |
| Base to Emitter Saturation Voltage      | $V_{BE(sat)}$ | $I_C=10mA$ $I_B=1.0mA$          |     |     | 1.0 | V    |
| Transition Frequency                    | $f_T$         | $V_{CE}=10V$ $I_C=20mA$         | 50  | 70  |     | MHz  |
| Collector output capacitance            | $C_{ob}$      | $V_{CB}=20V$ $f=1.0MHz$ $I_E=0$ |     | 3.0 |     | pF   |

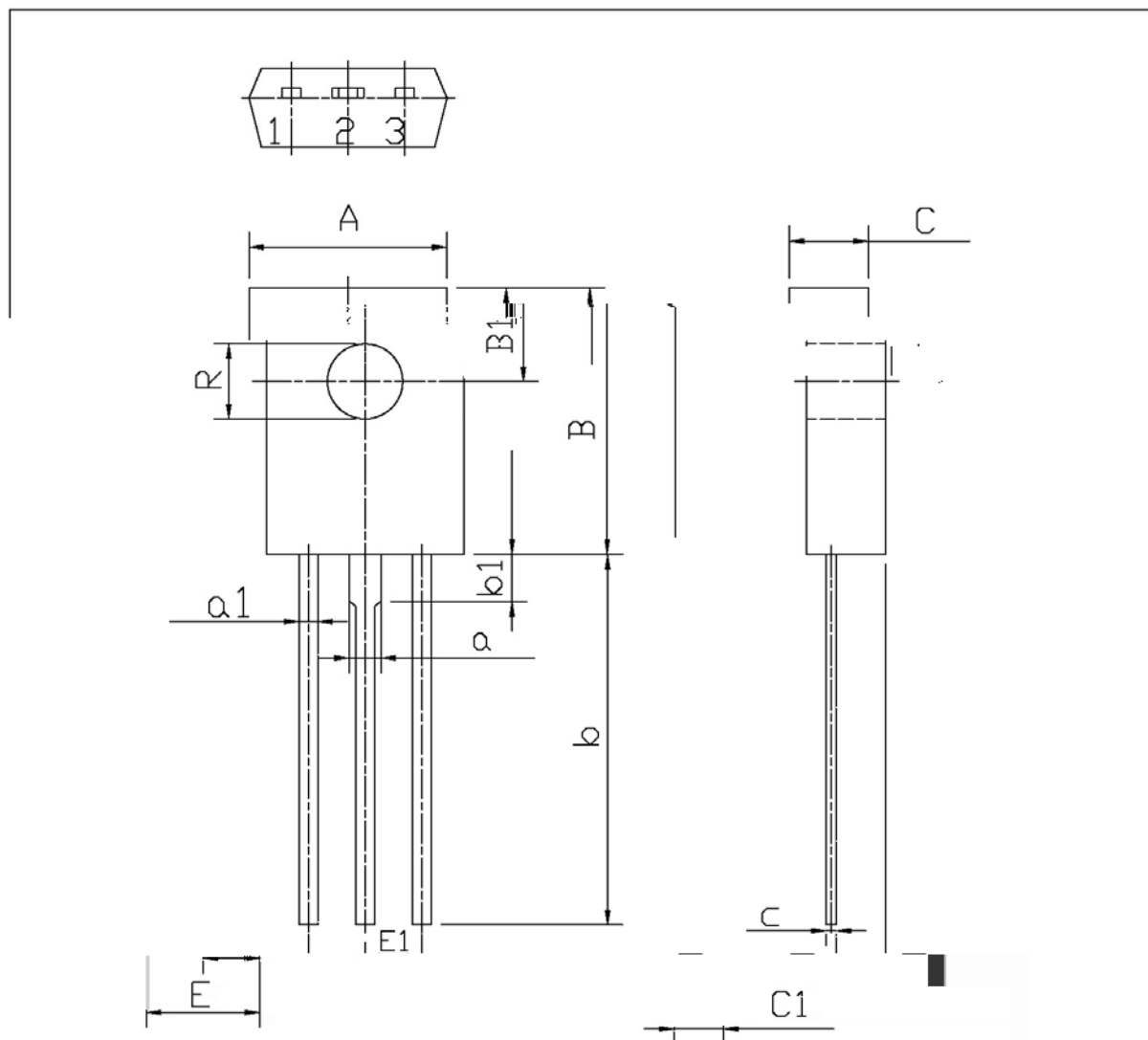
/ Electrical Characteristic Curve



/ Package Dimensions

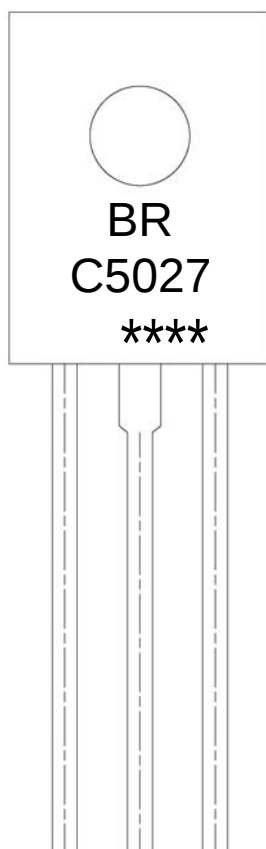
T□-126F

单位: mm



| Symbol | Min  | Max  | Symbol | Min  | Max |
|--------|------|------|--------|------|-----|
| A      | 7.8  | 8.2  | a1     | 0.66 | 0.8 |
| B      | 10.8 | 11.2 | E1     | 4.4  | 4.8 |
| B1     | 3.8  | 4.2  | C      | 3.1  | 3.5 |
| R      | 2.5  | 2.8  | C1     | 1.9  | 2.3 |
| E      | 1.27 | 1.5  | b1     | 1.9  | 2.3 |
|        |      |      | a      | 0.66 | 0.8 |

**/ Marking Instructions**



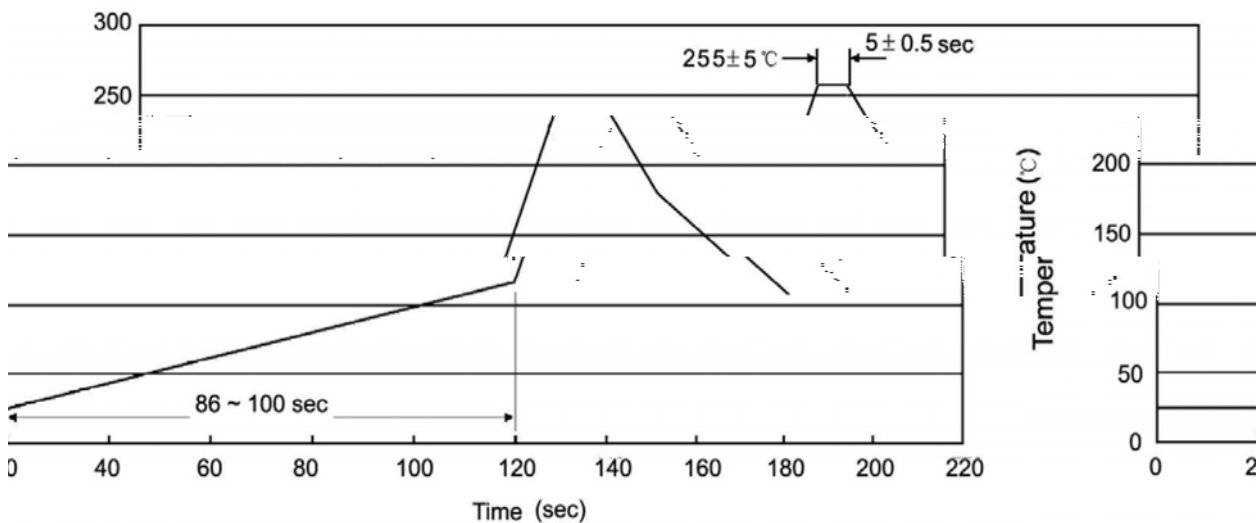
Note:

BR: Company Code

C5027: 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/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-126/F             | 500                | 6                       | 3,000                  | 5                            | 15,000                 | 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-126/F             | 65                 | 26                      | 1,690                  | 5                            | 8,450                  | 532×31×5.6                              | 555×164×50  | 575×290×180 |

/ Notices