

### / Descriptions

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

### / Features

Complements the 2SB1436.  
Low  $V_{CE(sat)}$ , excellent DC current gain, complements the 2SB1436.

### / Applications

Strobe flash applications, general power amplifier applications.

### / Equivalent Circuit



### / Pinning



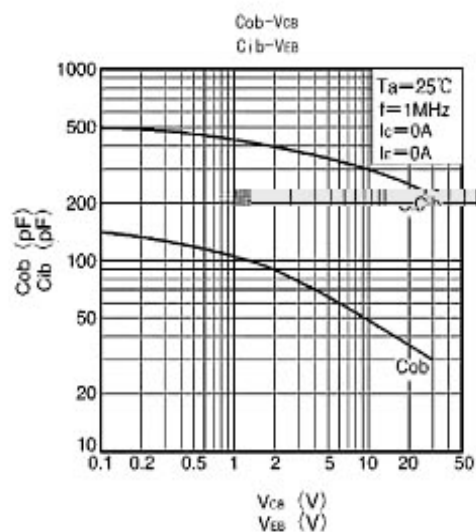
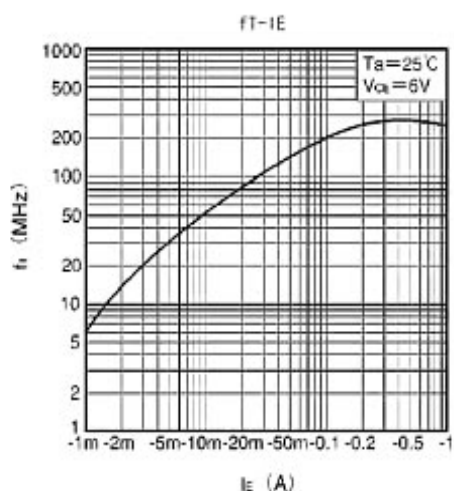
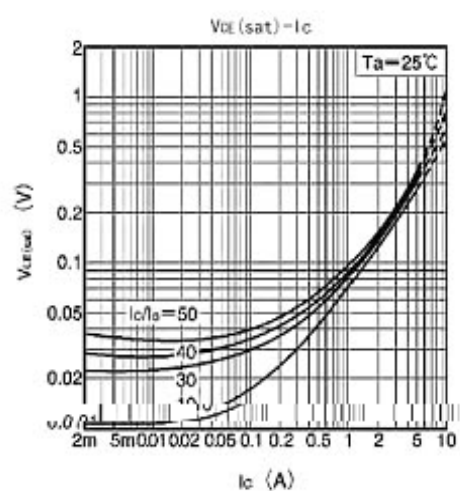
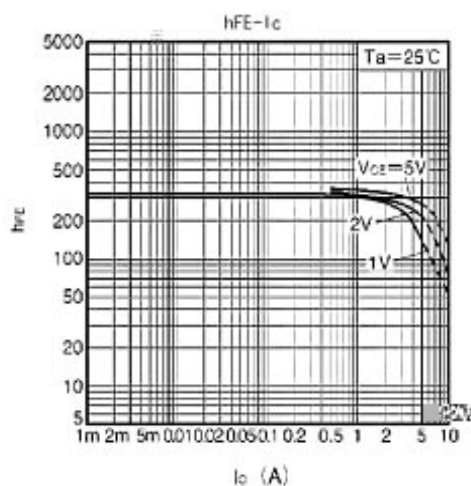
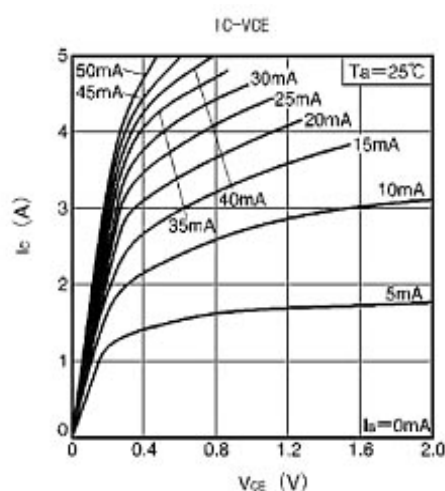
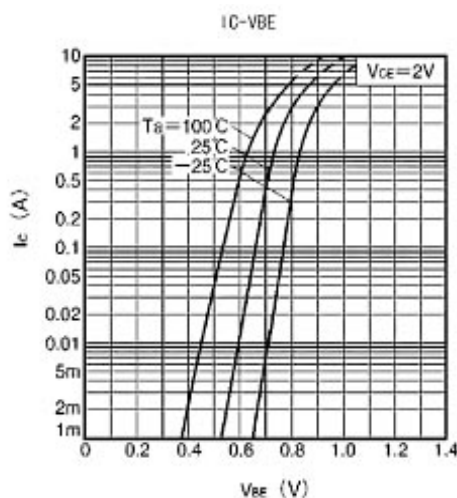
PIN1   Emitter      PIN 2   Collector      PIN 3   Base

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

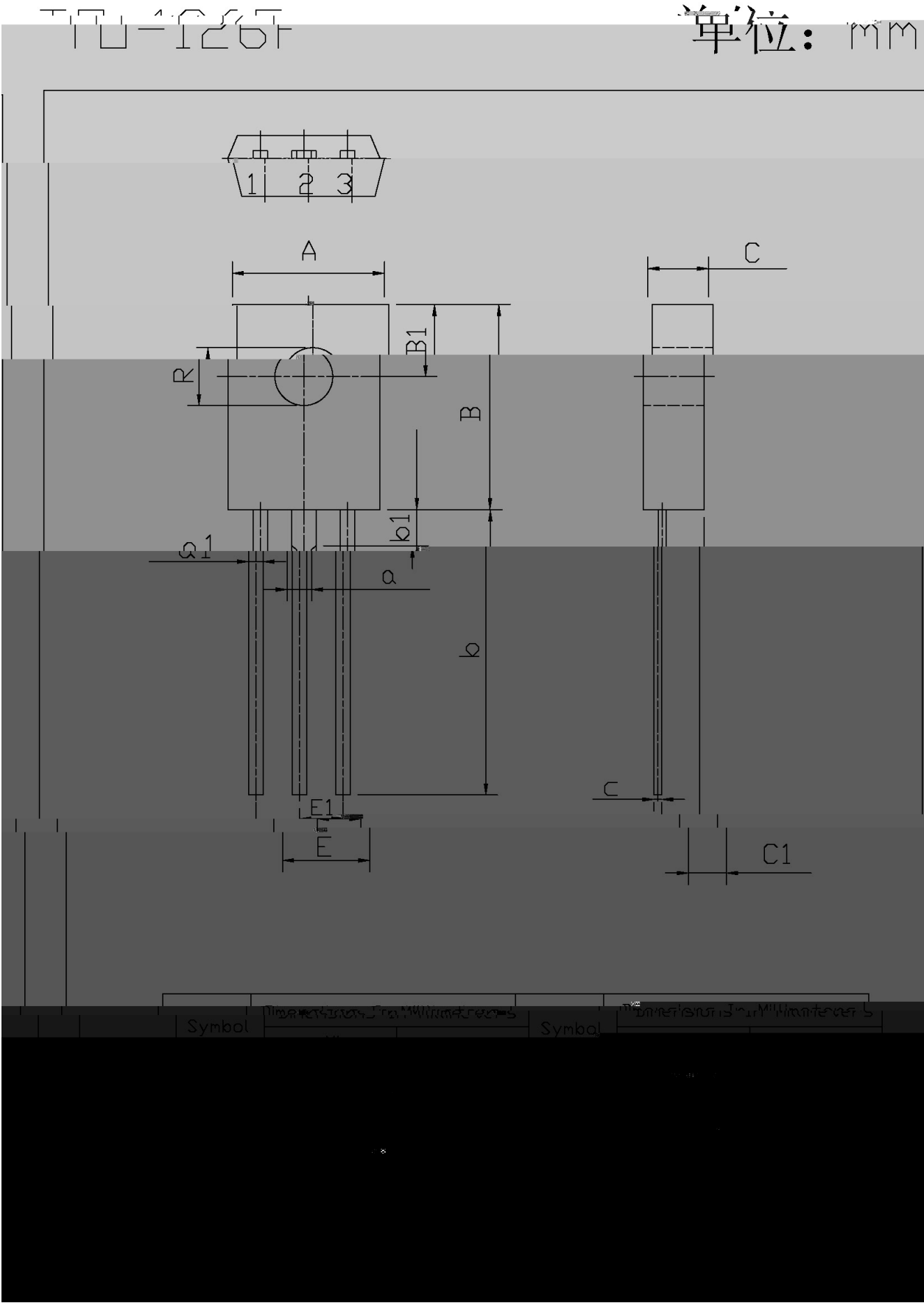
|                                    |           |           |
|------------------------------------|-----------|-----------|
| $h_{FE}$ Classifications<br>Symbol | Q         | R         |
| $h_{FE}$ Range                     | 120   270 | 180   390 |

| Parameter                             | Symbol                | Rating | Unit |
|---------------------------------------|-----------------------|--------|------|
| Collector to Base Voltage             | $V_{CBO}$             | 50     | V    |
| Collector to Emitter Voltage          | $V_{CEO}$             | 20     | V    |
| Emitter to Base Voltage               | $V_{EBO}$             | 6.0    | V    |
| Collector Current - Continuous        | $I_C$                 | 5.0    | A    |
| Collector Current – Continuous(Pulse) | $I_{CP}$              | 10     | A    |
| Collector Power Dissipation           | $P_C$                 | 1.5    | W    |
| Collector Power Dissipation           | $P_C(T_c=25^\circ C)$ | 5.0    | W    |
| Junction Temperature                  | $T_j$                 | 150    |      |
| Storage Temperature Range             | $T_{stg}$             |        |      |

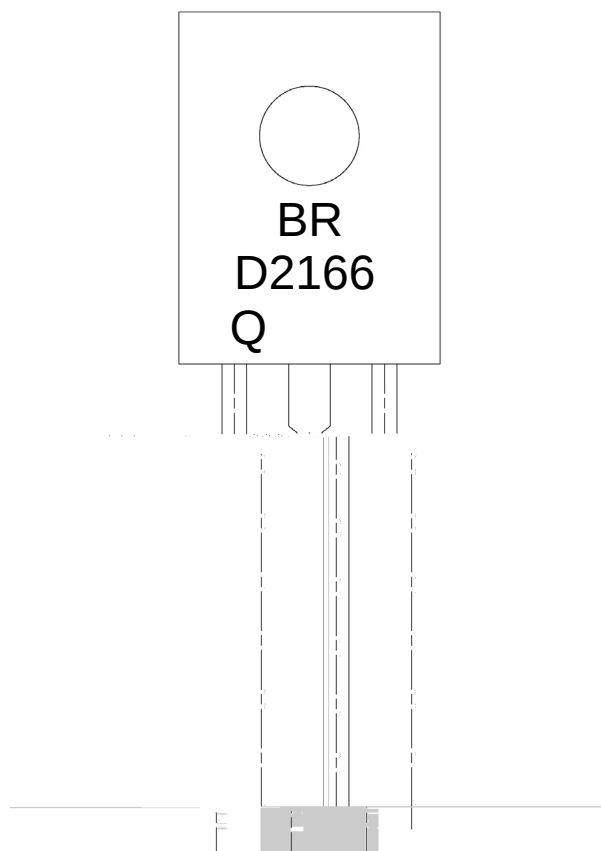
/ **Electrical Characteristic Curve**



/ Package Dimensions



/ Marking Instructions



BR

D2166

Q:  $h_{FE}$

\*\*\*\*

Note:

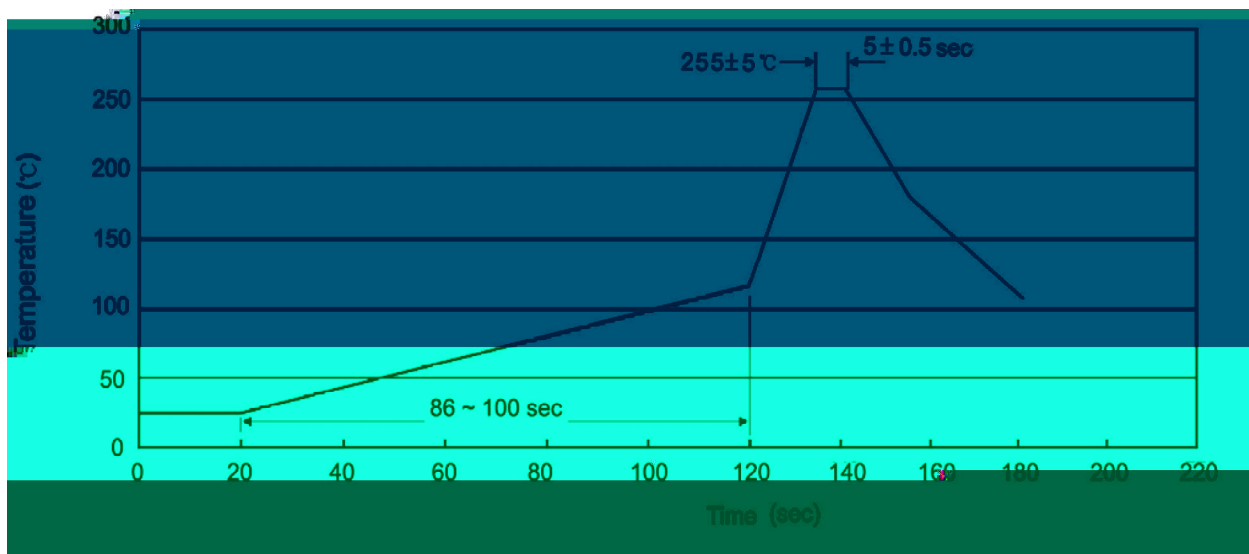
BR: Company Code

D2166: Product Type.

Q:  $h_{FE}$  Classifications Symbol

\*\*\*\*: 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> ) |   |   |
|----------------------|------------|------|-----|-----|-----|-----------------------------------------|---|---|
|                      | 只 套管       | 套管 盒 | 只 盒 | 盒 箱 | 只 箱 | 套管                                      | 盒 | 箱 |
|                      |            |      |     |     |     |                                         |   |   |

/ TUBE

| Package Type<br>封装形式 | Units 包装数量 |      |     |     |     | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |   |   |
|----------------------|------------|------|-----|-----|-----|-----------------------------------------|---|---|
|                      | 只 套管       | 套管 盒 | 只 盒 | 盒 箱 | 只 箱 | 套管                                      | 盒 | 箱 |
|                      |            |      |     |     |     |                                         |   |   |

/ Notices