

## / Descriptions

SOT-23          NPN          Silicon NPN transistor in a SOT-23 Plastic Package.

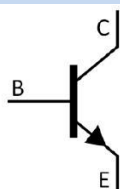
## / Features

High  $f_T$ .

## / Applications

High frequency general-purpose amplifier applications.

## / Equivalent Circuit



## / Pinning



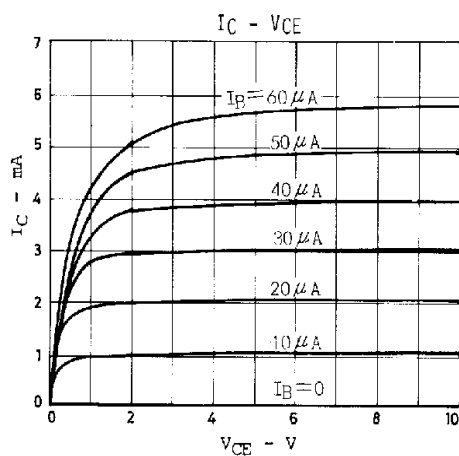
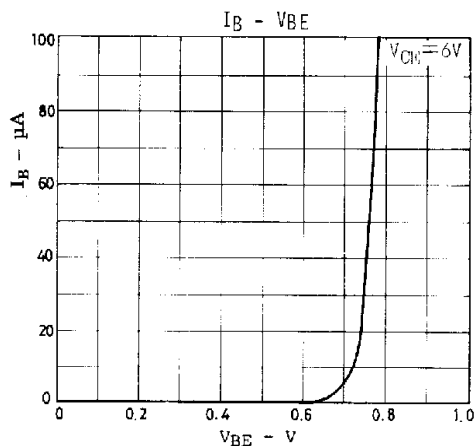
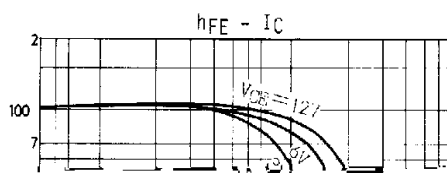
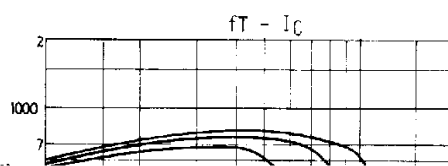
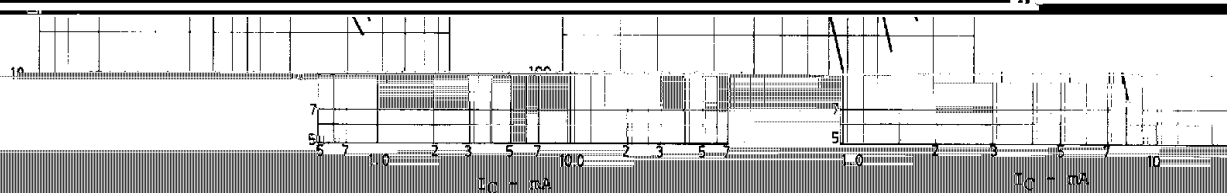
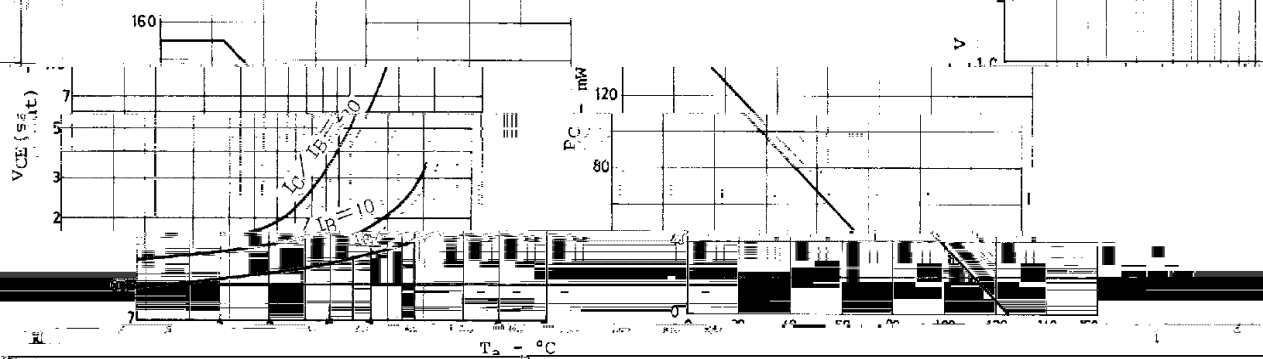
PIN1   Base          PIN 2   Emitter          PIN 3   Collector

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

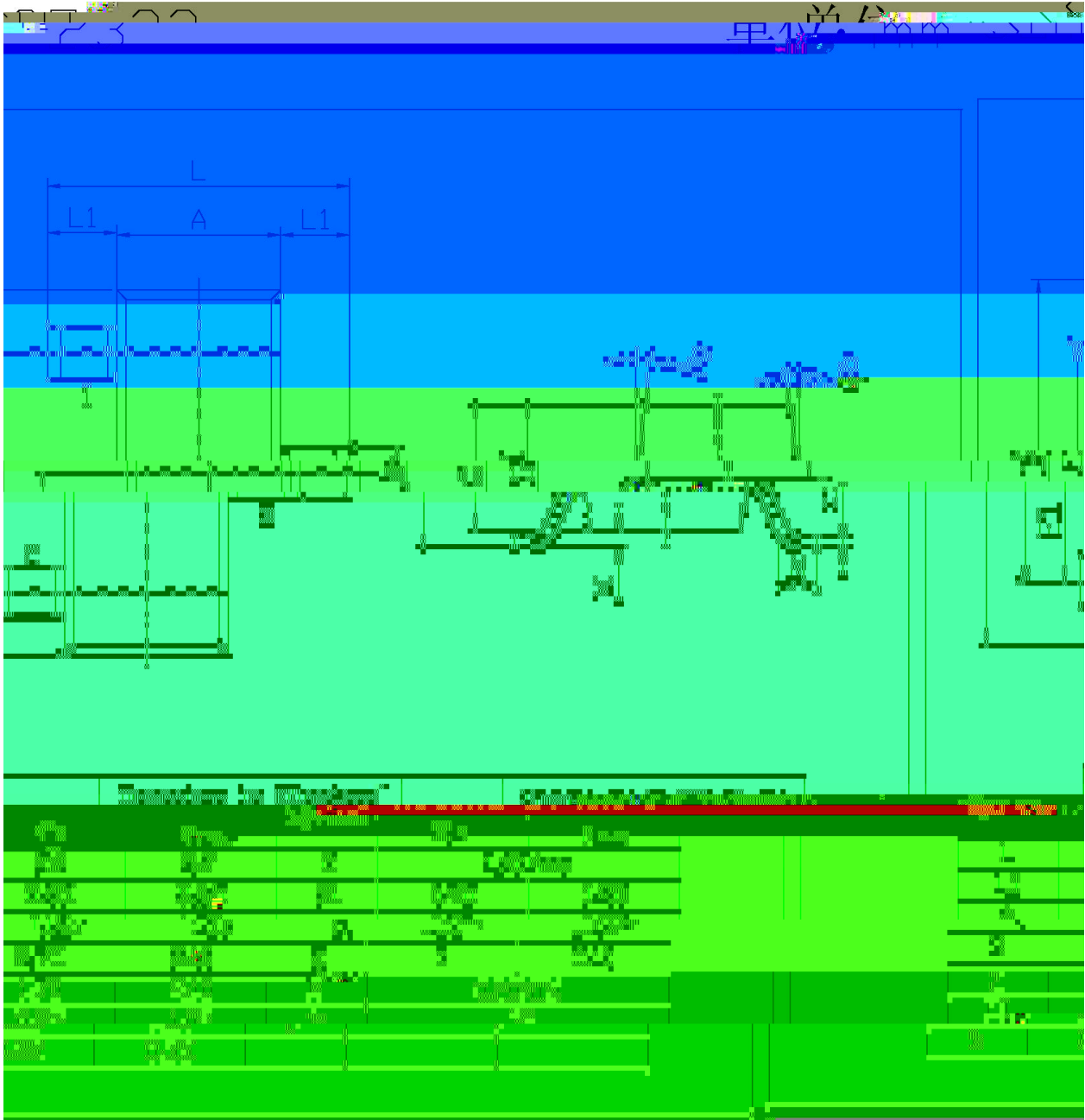
| $h_{FE}$ Classifications<br>Symbol | 2       | 3        | 4        |
|------------------------------------|---------|----------|----------|
| $h_{FE}$ Range                     | 40   80 | 60   120 | 90   180 |
| Marking                            | HJ2     | J3H      | HJ4      |

| Parameter                    | Symbol    | Rating | Unit |
|------------------------------|-----------|--------|------|
| Collector to Base Voltage    | $V_{CBO}$ | 25     | V    |
| Collector to Emitter Voltage | $V_{CEO}$ | 20     | V    |
| Emitter to Base Voltage      | $V_{EBO}$ | 3.0    | V    |
| Collector Current            | $I_C$     | 30     | mA   |
| Collector Power Dissipation  | $P_C$     | 150    | mW   |
| Junction Temperature         | $T_j$     | 150    |      |
| Storage Temperature Range    | $T_{stg}$ |        |      |

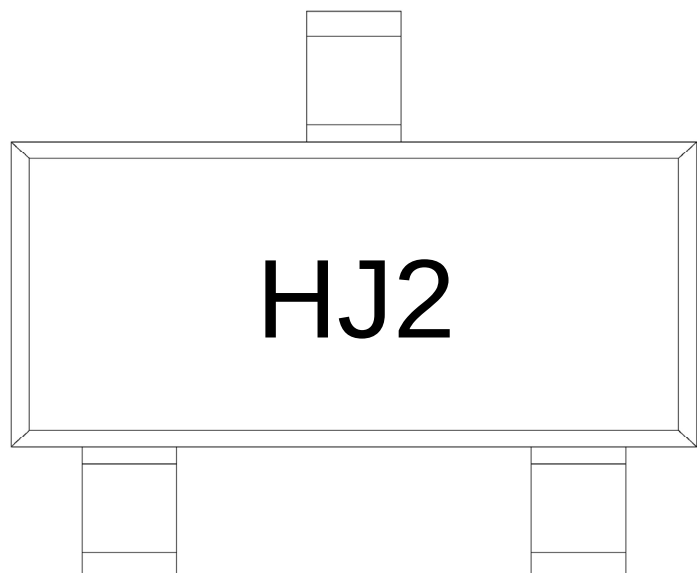
# Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H

J

2  $h_{FE}$

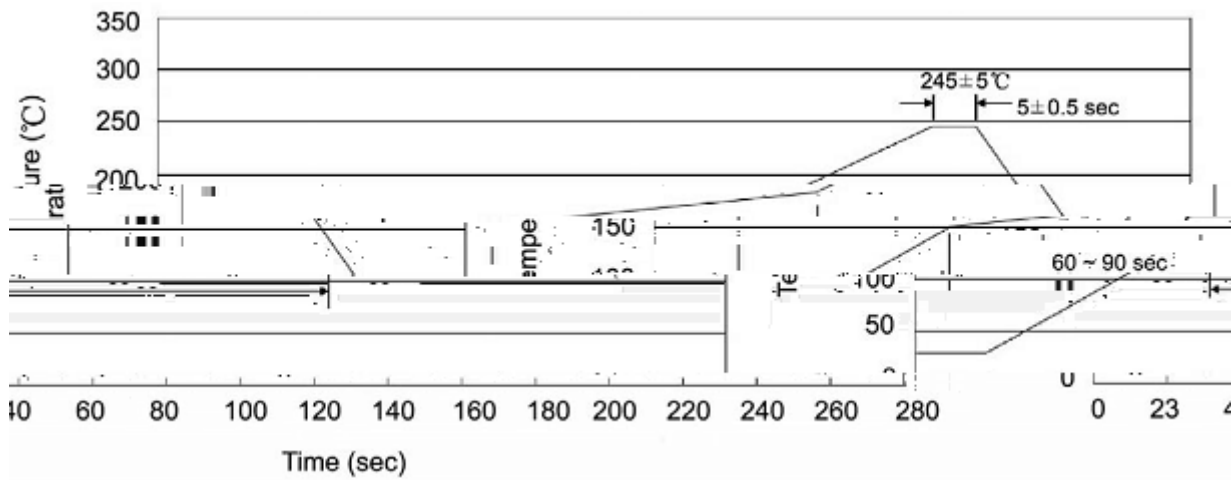
Note:

H Company Code

J Product Type Code

2  $h_{FE}$  Classifications Symbol Code

(     ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- |   |       |     |    |           |                                         |
|---|-------|-----|----|-----------|-----------------------------------------|
| 1 | 25    | 150 | 60 | 90sec;    | 1.Preheating:25~150 , Time:60~90sec.    |
| 2 | 245±5 |     |    | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 |       |     | 2  | 10 /sec.  | 3. Cooling Speed: 2~10 /sec.            |

/ Resistance to Soldering Heat Test Conditions

260±5                      10±1 sec.                      Temp.:260±5                      Time:10±1 sec

/ Packaging SPEC.

/ REEL

|       |       |           |                         |
|-------|-------|-----------|-------------------------|
| _____ | Units | Dimension | (unit mm <sup>3</sup> ) |
|-------|-------|-----------|-------------------------|