

**/ Descriptions**

SOT-323          NPN                          Silicon NPN transistor in a SOT-323 Plastic Package.

**/ Features**

High  $f_T$ , small  $C_{C.rbb}$  and high gain, small NF.

**/ Applications**

High-Frequency amplifier transistor

**/ Equivalent Circuit**



**/ Pinning**



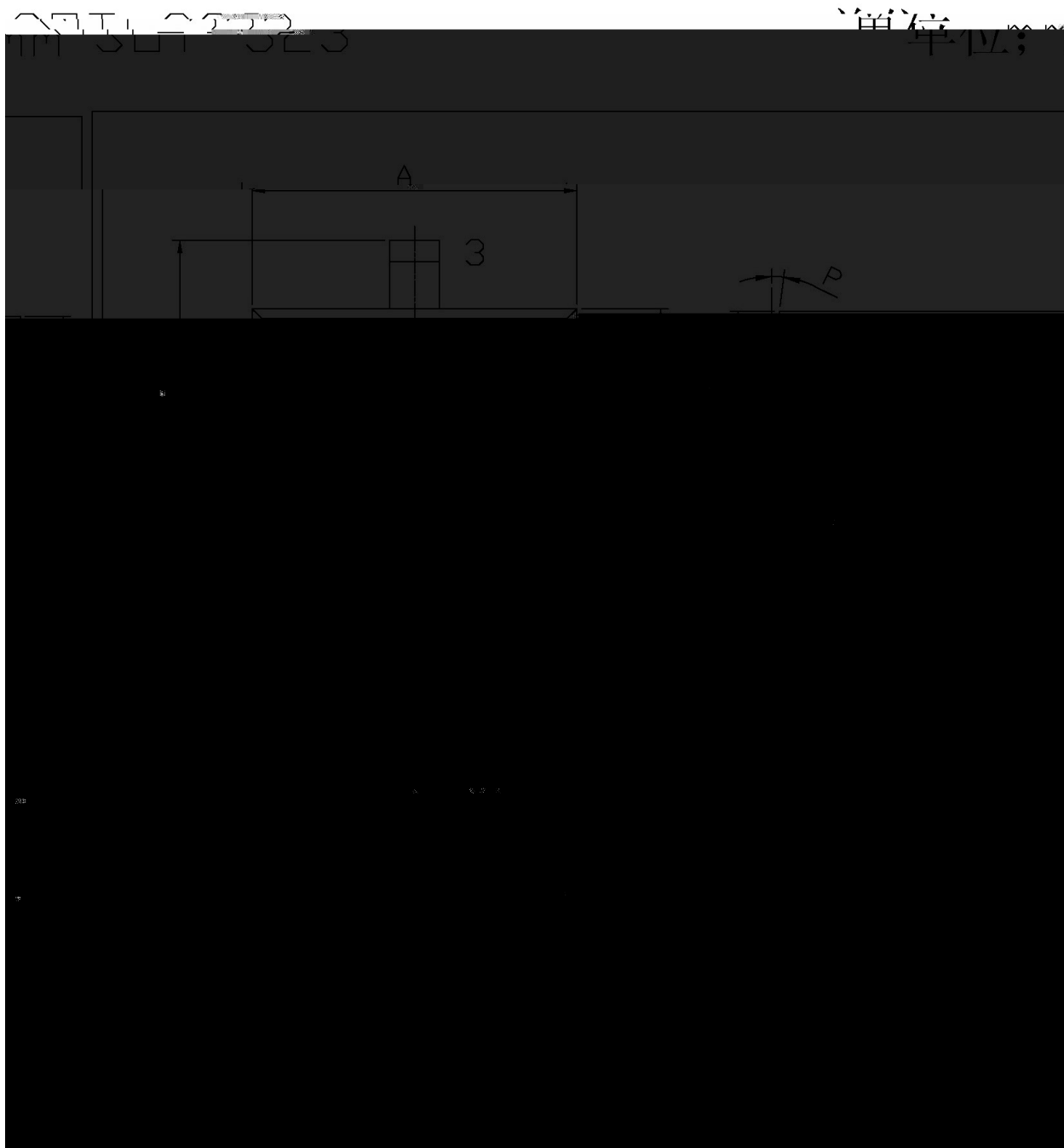
PIN1 Emitter          PIN 2 Base          PIN 3 Collector

**/ Marking**

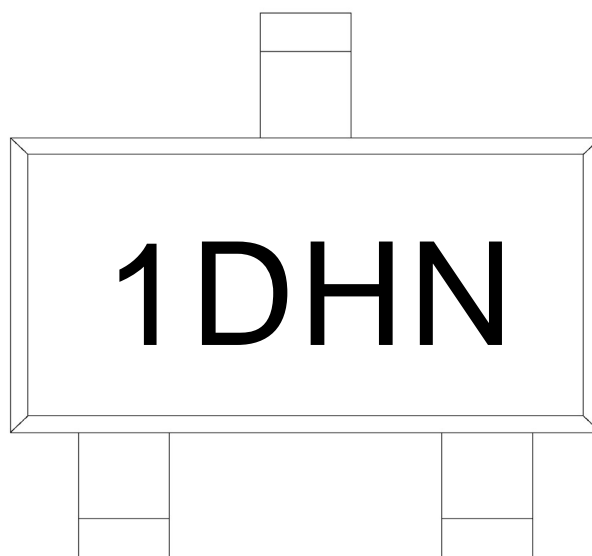
|                          |        |        |
|--------------------------|--------|--------|
| $h_{FE}$ Classifications | N      | P      |
| Symbol                   |        |        |
| $h_{FE}$ Range           | 56 120 | 82 180 |
| Marking                  | 1DHN   | 1DHP   |

| Parameter                      | Symbol    | Rating  | Unit |
|--------------------------------|-----------|---------|------|
| Collector to Base Voltage      | $V_{CBO}$ | 20      | V    |
| Collector to Emitter Voltage   | $V_{CEO}$ | 11      | V    |
| Emitter to Base Voltage        | $V_{EBO}$ | 3.0     | V    |
| Collector Current - Continuous | $I_C$     | 50      | mA   |
| Collector Power Dissipation    | $P_C$     | 200     | mW   |
| Junction Temperature           | $T_j$     | 150     |      |
| Storage Temperature Range      | $T_{stg}$ | -55 150 |      |

/ Package Dimensions



/ Marking Instructions



1D

H

N  $h_{FE}$

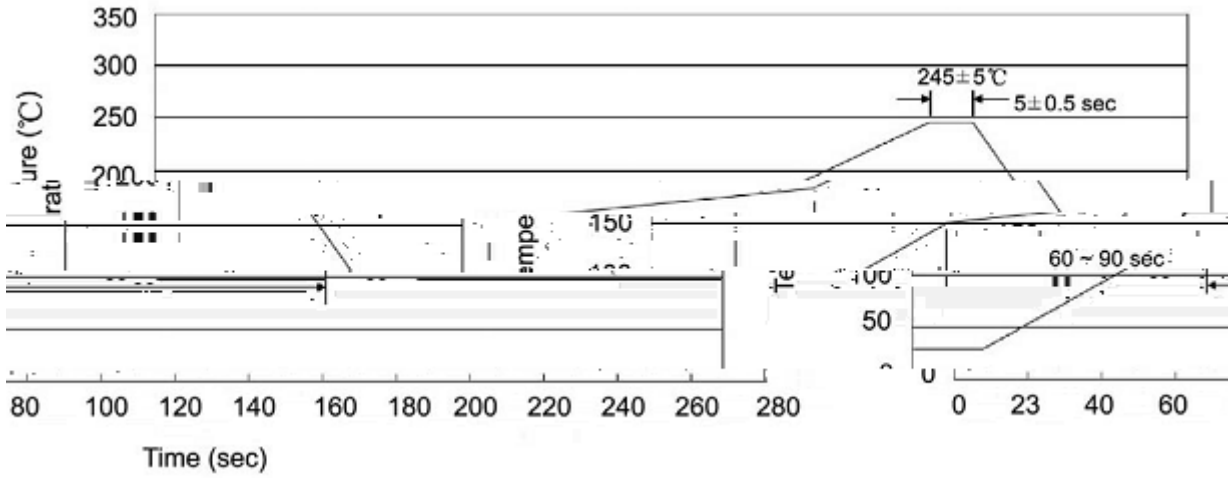
Note:

1D: Product Type.

H: Company Code.

N:  $h_{FE}$  Classifications Symbol

( ) / K\d g\iXk i\`Gif]`d`]fi`@`l`]\`fn`Jfd` \i`e`^ZGY\$=i\`z



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

| Package Type | Units      |                 |                 |                       |                 | Dimension (unit mm <sup>3</sup> ) |             |             |
|--------------|------------|-----------------|-----------------|-----------------------|-----------------|-----------------------------------|-------------|-------------|
|              | Units/Reel | Reels/Inner Box | Units/Inner Box | Inner Boxes/Outer Box | Units/Outer Box | Reel                              | Inner Box   | Outer Box   |
| SOT-323      | 3,000      | 10              | 30,000          | 6                     | 180,000         | 7 ×8                              | 180×120×180 | 390×385×205 |

/ Notices