

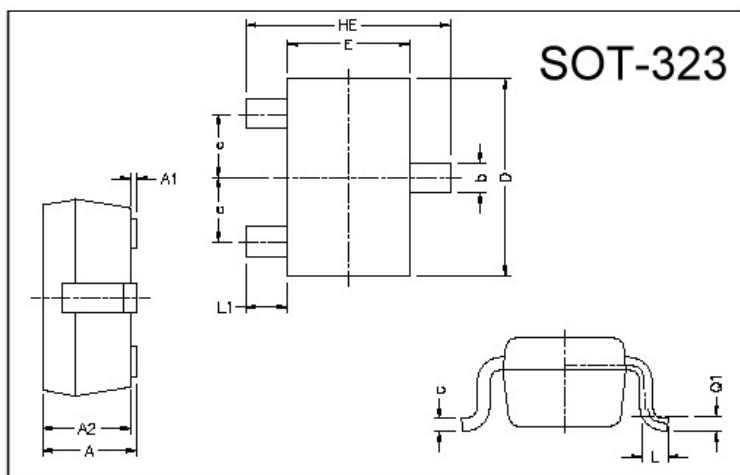
## GSMBT9015

## PNP EPITAXIAL PLANAR TRANSISTOR

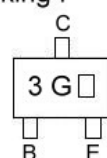
## Description

The GSMBT9015 is designed for use in pre-amplifier of low level and low noise.

## Package Dimensions



Marking :



□ :hFE Rank Code

| REF. | Millimeter |      | REF. | Millimeter |      |
|------|------------|------|------|------------|------|
|      | Min.       | Max. |      | Min.       | Max. |
| A    | 0.80       | 1.10 | L1   | 0.42 REF.  |      |
| A1   | 0          | 0.10 | L    | 0.15       | 0.35 |
| A2   | 0.80       | 1.00 | b    | 0.25       | 0.40 |
| D    | 1.80       | 2.20 | c    | 0.10       | 0.25 |
| E    | 1.15       | 1.35 | e    | 0.65 REF.  |      |
| HE   | 1.80       | 2.40 | Q1   | 0.15 BSC.  |      |

## Absolute Maximum Ratings at Ta = 25°C

| Parameter                    | Symbol | Ratings    | Unit |
|------------------------------|--------|------------|------|
| Junction Temperature         | Tj     | +150       | °C   |
| Storage Temperature          | Tstg   | -55 ~ +150 | °C   |
| Collector to Base Voltage    | VCBO   | -50        | V    |
| Collector to Emitter Voltage | VCEO   | -45        | V    |
| Emitter to Base Voltage      | VEBO   | -5         | V    |
| Collector Current            | IC     | -100       | mA   |
| Total Power Dissipation      | PD     | 225        | mW   |

## Characteristics at Ta = 25°C

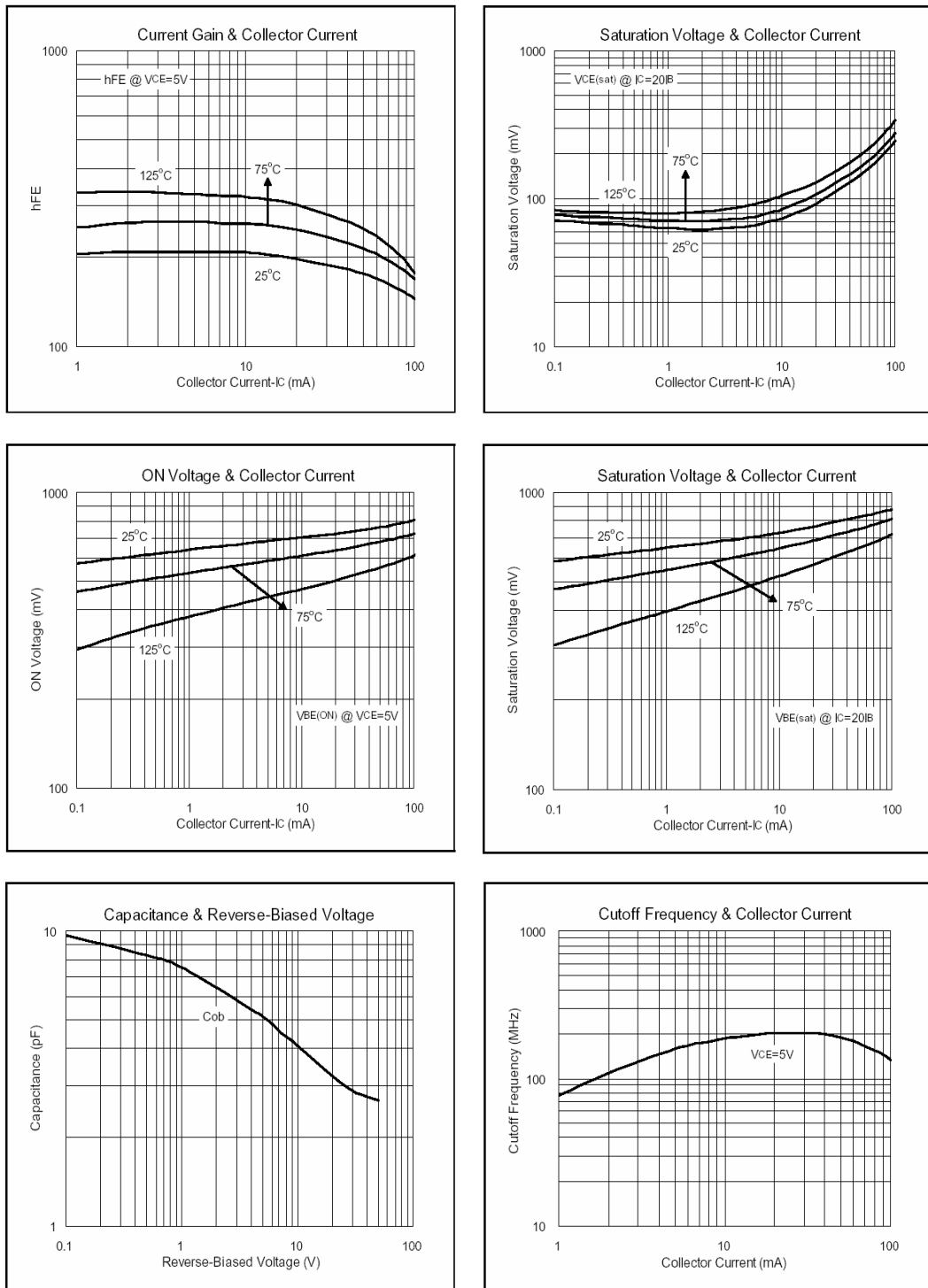
| Symbol    | Min. | Typ.  | Max.  | Unit | Test Conditions    |
|-----------|------|-------|-------|------|--------------------|
| BVCBO     | -50  | -     | -     | V    | IC=-100uA, IE=0    |
| BVCEO     | -45  | -     | -     | V    | IC=-1mA, IB=0      |
| BVEBO     | -5   | -     | -     | V    | IE=-100uA, IC=0    |
| ICBO      | -    | -     | -50   | nA   | VCB=-50V, IE=0     |
| IEBO      | -    | -     | -50   | nA   | VEB=-5V, IC=0      |
| *VCE(sat) | -    | -0.20 | -0.7  | V    | IC=-100mA, IB=-5mA |
| *VBE(sat) | -    | -0.82 | -1.0  | V    | IC=-100mA, IB=-5mA |
| VBE(on)   | -0.6 | -0.65 | -0.75 | V    | VCE=-5V, IC=-2mA   |
| *hFE      | 100  | 200   | 600   |      | VCE=-5V, IC=-1mA   |
| fT        | 100  | 190   | -     | MHz  | VCE=-5V, IC=-10mA  |
| Cob       | -    | 4.5   | 7     | pF   | VCB=-10V, f=1MHz   |

\* Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

## Classification Of hFE

| Rank  | 3GB       | 3GC       |
|-------|-----------|-----------|
| Range | 100 - 300 | 200 - 600 |

## Characteristics Curve



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