

GTM

CORPORATION

ISSUED DATE :2005/06/28  
REVISED DATE :

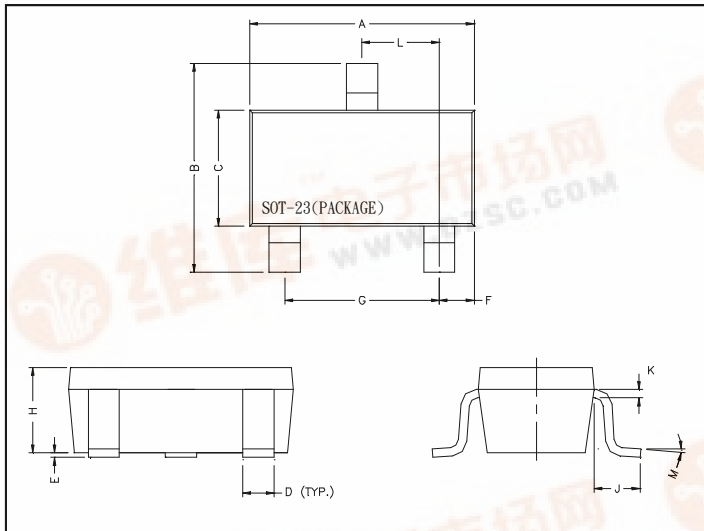
## GMBT5087

## PNP EPITAXIAL PLANAR TRANSISTOR

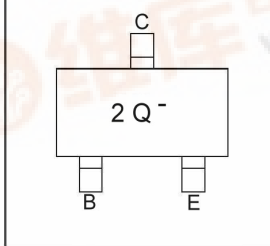
## Description

The GMBT5087 is designed for low noise, high gain and general purpose amplifier applications.

## Package Dimensions



Marking:



| REF. | Millimeter |      | REF. | Millimeter |      |
|------|------------|------|------|------------|------|
|      | Min.       | Max. |      | Min.       | Max. |
| A    | 2.70       | 3.10 | G    | 1.90       | REF. |
| B    | 2.40       | 2.80 | H    | 1.00       | 1.30 |
| C    | 1.40       | 1.60 | K    | 0.10       | 0.20 |
| D    | 0.35       | 0.50 | J    | 0.40       | -    |
| E    | 0          | 0.10 | L    | 0.85       | 1.15 |
| F    | 0.45       | 0.55 | M    | 0°         | 10°  |

## Absolute Maximum Ratings at Ta = 25°C

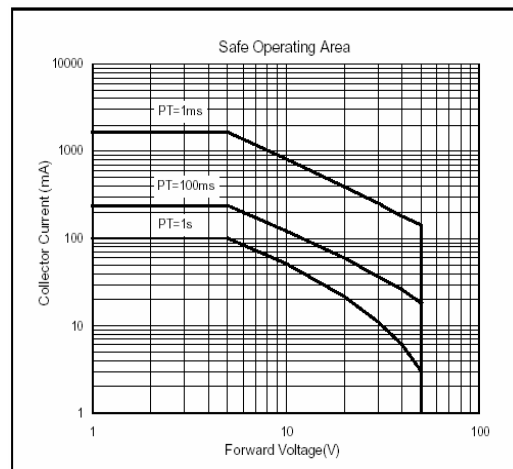
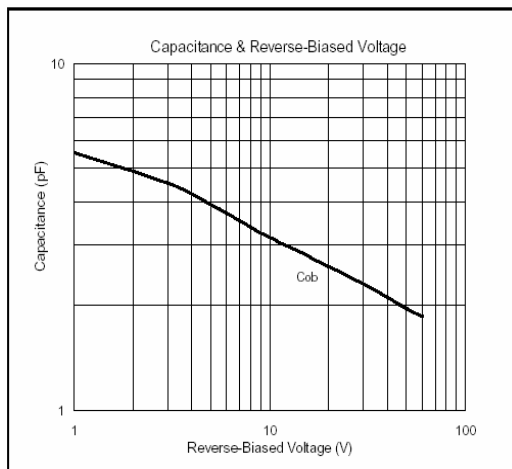
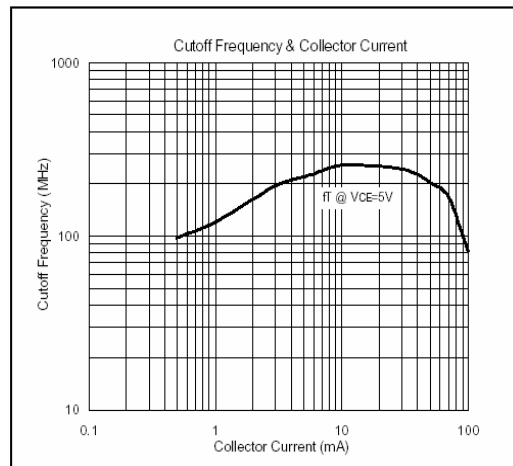
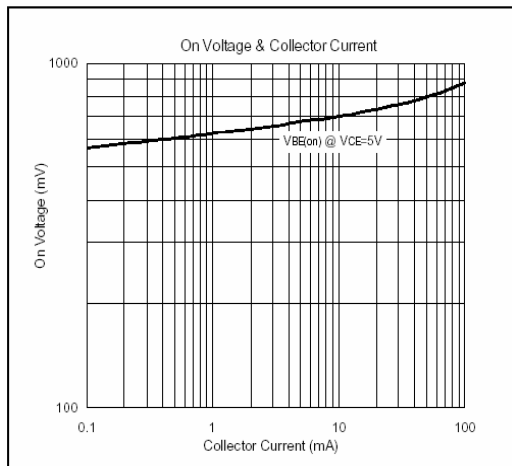
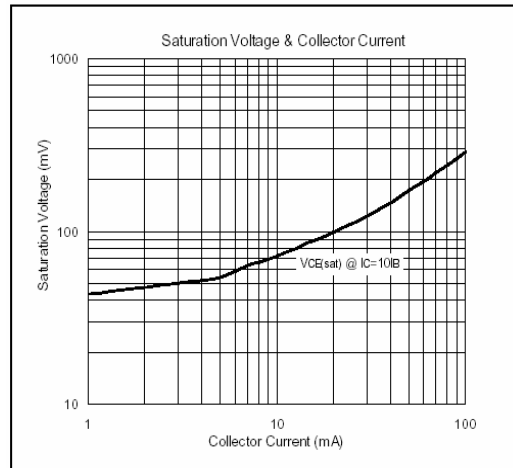
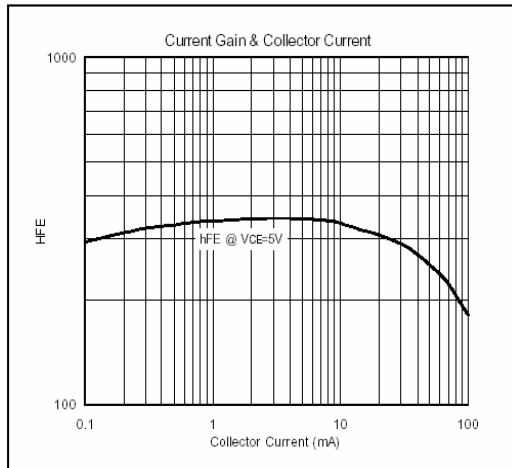
| Parameter                    | Symbol | Ratings  | Unit |
|------------------------------|--------|----------|------|
| Junction Temperature         | Tj     | +150     | °C   |
| Storage Temperature          | Tstg   | -55~+150 | °C   |
| Collector to Base Voltage    | VCBO   | -50      | V    |
| Collector to Emitter Voltage | VCEO   | -50      | V    |
| Emitter to Base Voltage      | VEBO   | -3       | V    |
| Collector Current            | IC     | -50      | mA   |
| Total Power Dissipation      | PD     | 225      | mW   |

## Electrical Characteristics(Ta = 25°C, unless otherwise noted)

| Symbol    | Min. | Typ. | Max. | Unit | Test Conditions              |
|-----------|------|------|------|------|------------------------------|
| BVCBO     | -50  | -    | -    | V    | IC=-100uA, IE=0              |
| BVCEO     | -50  | -    | -    | V    | IC=-1mA, IB=0                |
| BVEBO     | -3   | -    | -    | V    | IE=-10uA, IC=0               |
| ICBO1     | -    | -    | -10  | nA   | VCB=-10V, IE=0               |
| ICBO2     | -    | -    | -50  | nA   | VCB=-35V, IE=0               |
| *VCE(sat) | -    | -    | -300 | mV   | IC=-10mA, IB=-1mA            |
| *VBE(sat) | -    | -    | -850 | mV   | IC=-10mA, IB=-1mA            |
| *hFE1     | 250  | -    | 800  |      | VCE=-5V, IC=-0.1mA           |
| *hFE2     | 250  | -    | -    |      | VCE=-5V, IC=-1mA             |
| *hFE3     | 250  | -    | -    |      | VCE=-5V, IC=-10mA            |
| fr        | 40   | -    | -    | MHz  | VCE=-5V, IC=-0.5mA, f=100MHz |
| Cob       | -    | -    | 4.0  | pF   | VCB=-5V, f=100kHz            |

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

## Characteristics Curve



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