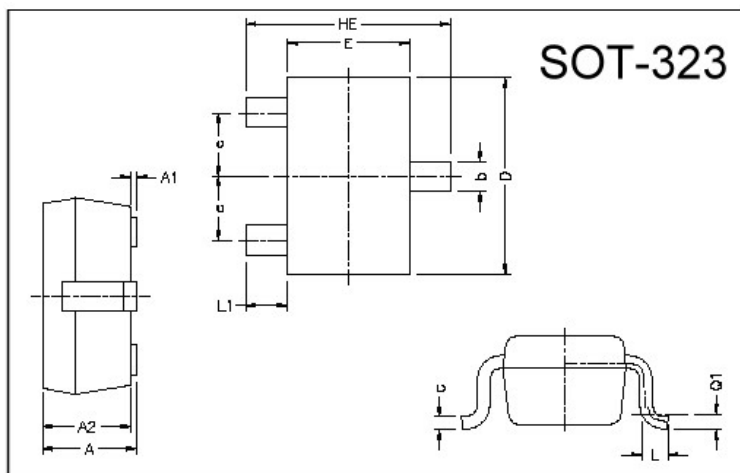


## GSMBT1623      NPN EPITAXIAL PLANAR TRANSISTOR

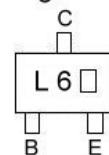
### Description

The GSMBT1623 is designed for use driver stage of AF amplifier and general purpose application.

### 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   | 60         | V    |
| Collector to Emitter Voltage | VCEO   | 50         | V    |
| Emitter to Base Voltage      | VEBO   | 5          | V    |
| Collector Current            | IC     | 150        | mA   |
| Total Power Dissipation      | PD     | 250        | mW   |

### Characteristics at Ta = 25°C

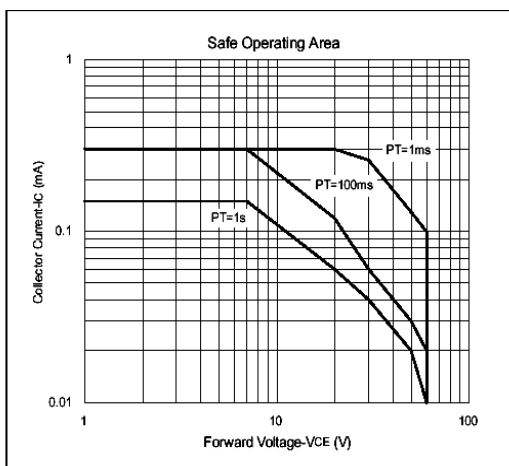
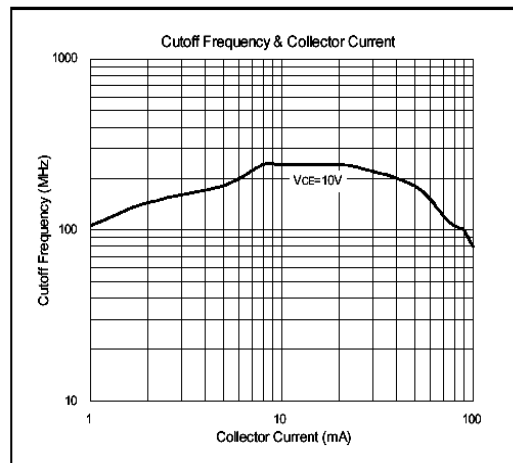
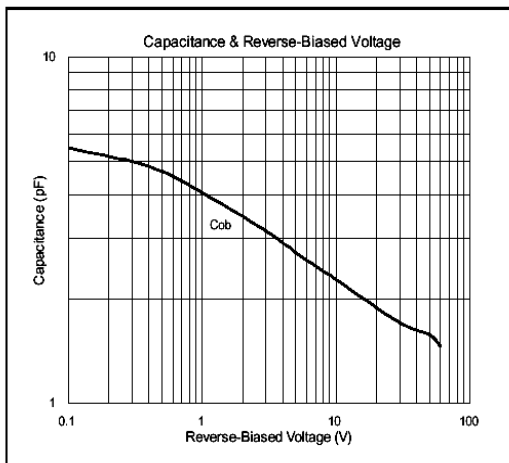
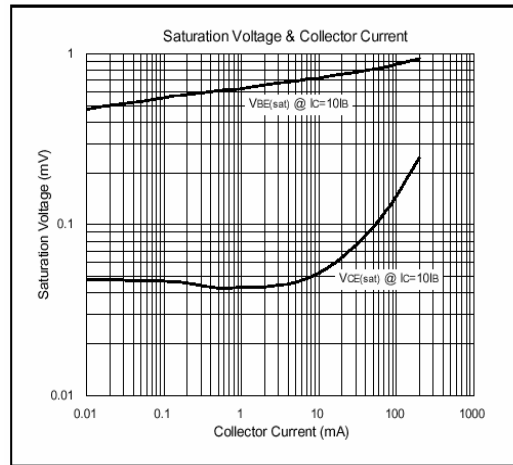
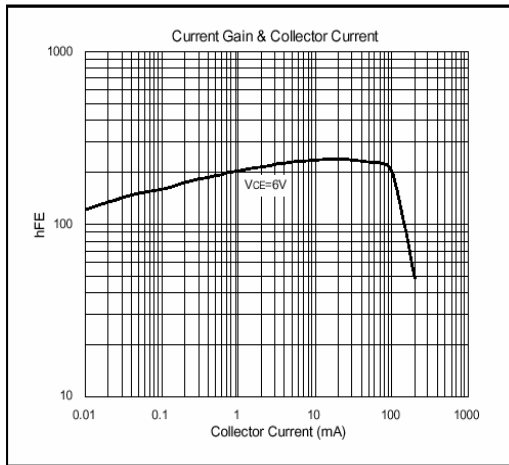
| Symbol     | Min. | Typ. | Max. | Unit | Test Conditions           |
|------------|------|------|------|------|---------------------------|
| BVCBO      | 60   | -    | -    | V    | IC=100uA                  |
| BVCEO      | 50   | -    | -    | V    | IC=1mA                    |
| BVEBO      | 5    | -    | -    | V    | IE=10uA                   |
| ICBO       | -    | -    | 100  | nA   | VCB=60V                   |
| IEBO       | -    | -    | 100  | nA   | VEB=5V                    |
| *VCE(sat)  | -    | -    | 250  | mV   | IC=100mA, IB=10mA         |
| *VBE(sat)1 | -    | -    | 1.0  | V    | IC=100mA, IB=10mA         |
| *hFE1      | 90   | -    | 600  |      | VCE=6V, IC=1mA            |
| *hFE2      | 25   | -    | -    |      | VCE=6V, IC=150mA          |
| *hFE3      | 80   | -    | -    |      | VCE=1V, IC=10mA           |
| fT         | 80   | -    | -    | MHz  | VCE=10V, IC=1mA, f=100MHz |
| Cob        | -    | -    | 3.5  | pF   | VCB=10V, f=1MHz, IE=0A    |

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

### Classification Of hFE1

| Rank  | L6P      | L6Y       | L6G       | L6B       |
|-------|----------|-----------|-----------|-----------|
| Range | 90 - 180 | 135 - 270 | 200 - 400 | 300 - 600 |

## Characteristics Curve



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