

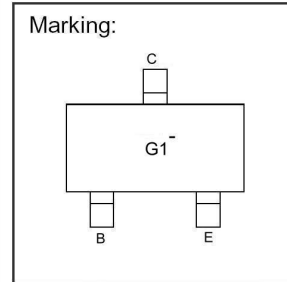
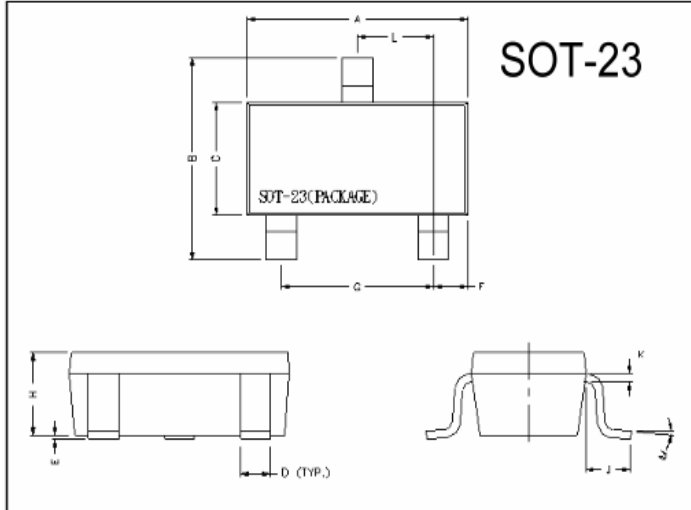
GMBT5551

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The GMBT5551 is designed for general purpose applications requiring high breakdown voltages.

Package Dimensions



| 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° |

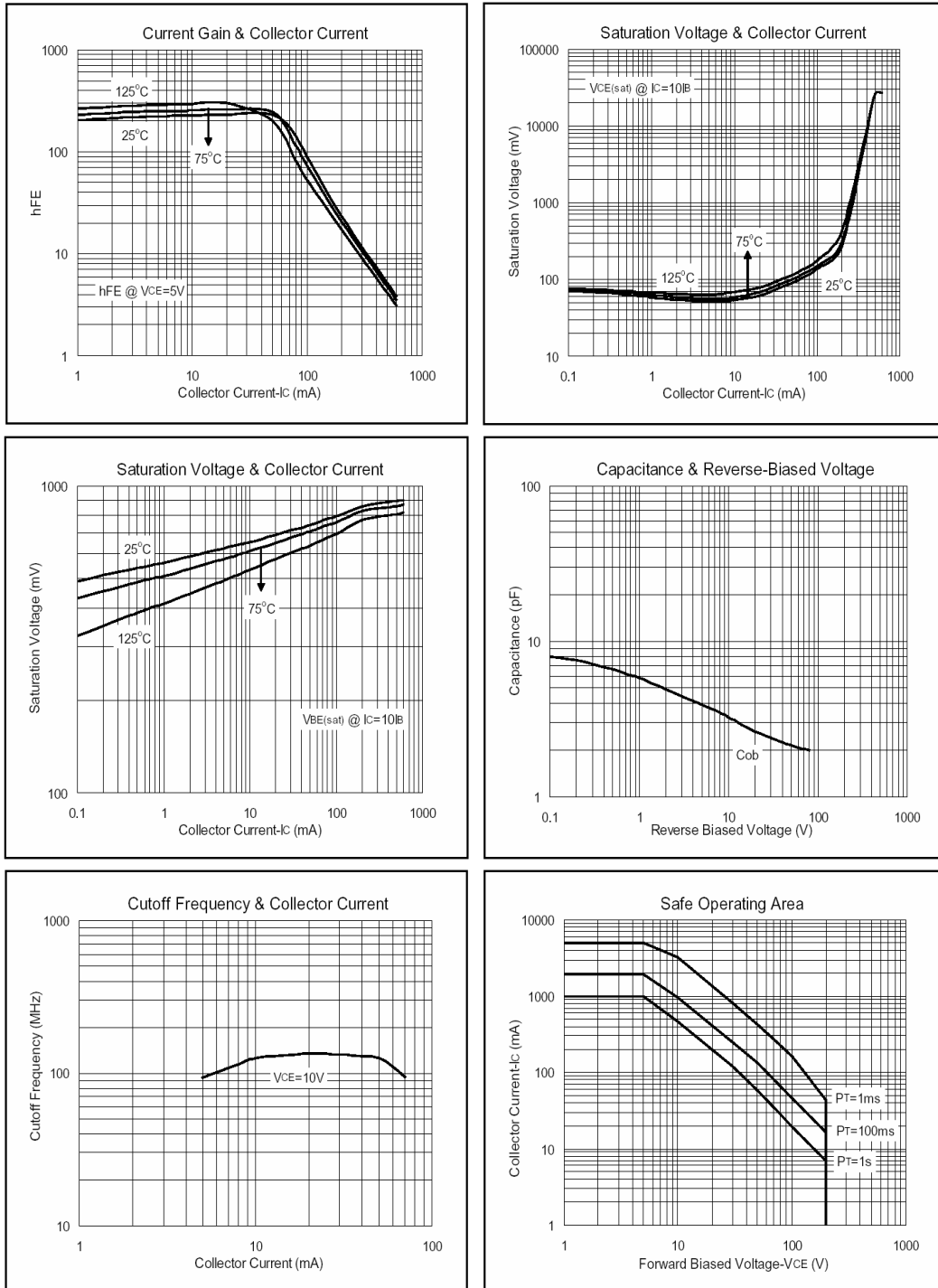
Absolute Maximum Ratings

| Parameter | Symbol | Ratings | Unit |
|------------------------------|------------------|------------|------|
| Junction Temperature | T _j | +150 | °C |
| Storage Temperature | T _{stg} | -55 ~ +150 | °C |
| Collector to Base Voltage | VCBO | 180 | V |
| Collector to Emitter Voltage | VCES | 160 | V |
| Emitter to Base Voltage | VEBO | 6.0 | V |
| Collector Current | I _C | 600 | mA |
| Total Power Dissipation | PD | 225 | mW |

Characteristics at Ta = 25°C

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|----------------|------|------|------|------|---|
| BVCBO | 180 | - | - | V | I _C =100uA |
| BVCEO | 160 | - | - | V | I _C =1mA |
| BVEBO | 6 | - | - | V | I _E =10uA |
| ICBO | - | - | 50 | nA | VCB=120V |
| IEBO | - | - | 50 | nA | VEB=4V |
| VCE(sat)1 | - | - | 150 | mV | I _C =10mA, I _B =1mA |
| VCE(sat)2 | - | - | 200 | mV | I _C =50mA, I _B =5mA |
| VBE(sat)1 | - | - | 1 | V | I _C =10mA, I _B =1mA |
| VBE(sat)2 | - | - | 1 | V | I _C =50mA, I _B =5mA |
| hFE1 | 80 | - | - | | VCE=5V, I _C =1mA |
| hFE2 | 80 | - | 250 | | VCE=5V, I _C =10mA |
| hFE3 | 30 | - | - | | VCE=5V, I _C =50mA |
| f _T | 100 | - | 300 | MHz | VCE=10V, I _C =10mA, f=100MHz |
| Cob | - | - | 6 | pF | VCB=10V, f=1MHz |

Characteristics Curve



Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of GTM.
- GTM reserves the right to make changes to its products without notice.
- GTM semiconductor products are not warranted to be suitable for use in life-support Applications, or systems.
- GTM assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

Head Office And Factory:

- **Taiwan:** No. 17-1 Tatung Rd. Fu Kou Hsin-Chu Industrial Park, Hsin-Chu, Taiwan, R. O. C.
TEL : 886-3-597-7061 FAX : 886-3-597-9220, 597-0785
- **China:** (201203) No.255, Jang-Jiang Tsai-Lueng RD. , Pu-Dung-Hsin District, Shang-Hai City, China
TEL : 86-21-5895-7671 FAX : 86-21-38950165