

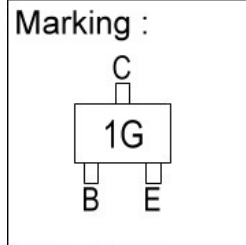
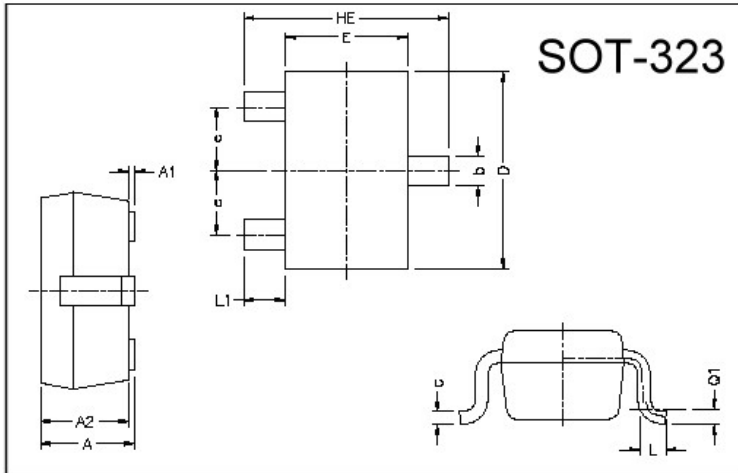
G SMBTA06

NPN SILICON TRANSISTOR

Description

The GSMBTA06 is designed for general purpose amplifier applications.

Package Dimensions



| 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

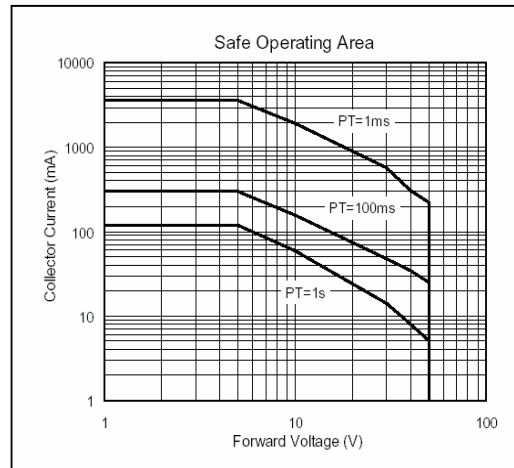
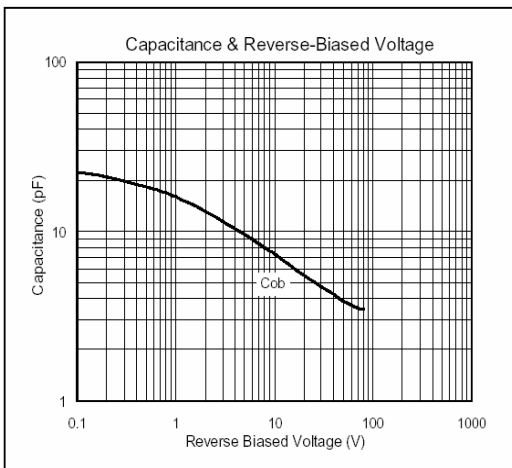
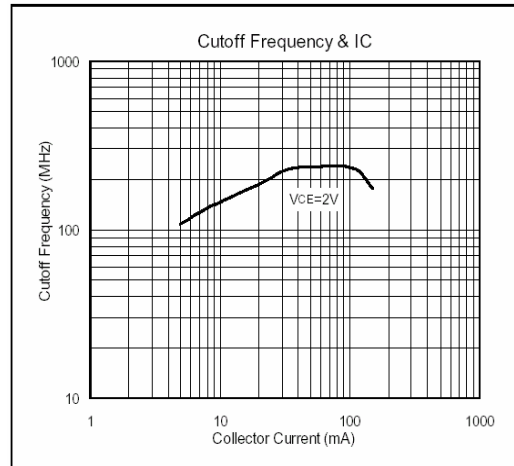
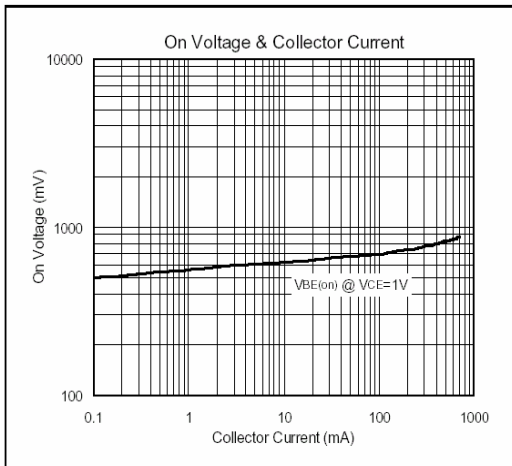
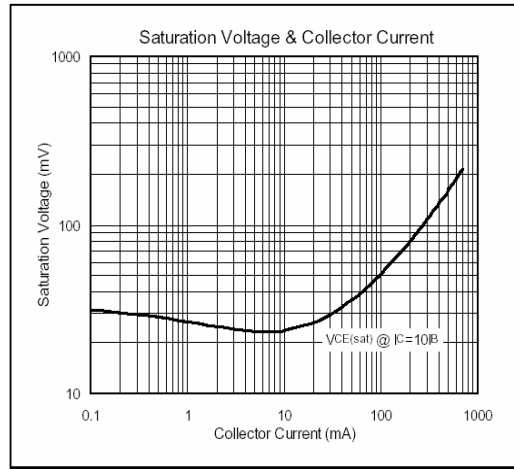
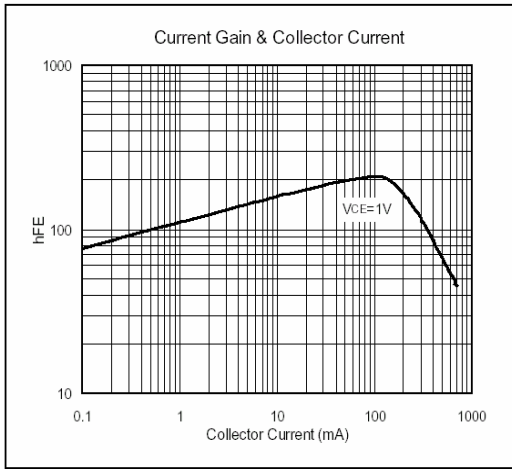
| Parameter | Symbol | Ratings | Unit |
|------------------------------|--------|----------|------|
| Junction Temperature | Tj | +150 | °C |
| Storage Temperature | Tstg | -55~+150 | °C |
| Collector to Base Voltage | VCBO | 80 | V |
| Collector to Emitter Voltage | VCEO | 80 | V |
| Emitter to Base Voltage | VEBO | 4 | V |
| Collector Current | Ic | 500 | mA |
| Total Power Dissipation | Pd | 225 | mW |

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

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|-----------|------|------|------|------|---------------------------|
| BVCBO | 80 | - | - | V | Ic=100uA, IE=0 |
| BVCEO | 80 | - | - | V | Ic=1mA, IB=0 |
| BVEBO | 4 | - | - | V | IE=100uA, Ic=0 |
| ICBO | - | - | 100 | nA | Vcb=80V, IE=0 |
| ICEO | - | - | 100 | nA | VCE=80V, IB=0 |
| *VCE(sat) | - | - | 250 | mV | Ic=100mA, IB=10mA |
| *VBE(on) | - | - | 1.2 | V | VCE=1V, Ic=100mA |
| *hFE1 | 50 | - | - | | VCE=1V, Ic=10mA |
| *hFE2 | 50 | - | - | | VCE=1V, Ic=100mA |
| fT | 100 | - | - | MHz | VCE=2V, Ic=10mA, f=100MHz |

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

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 ~ 4 FAX : 86-21-38950165