

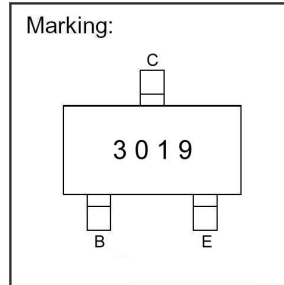
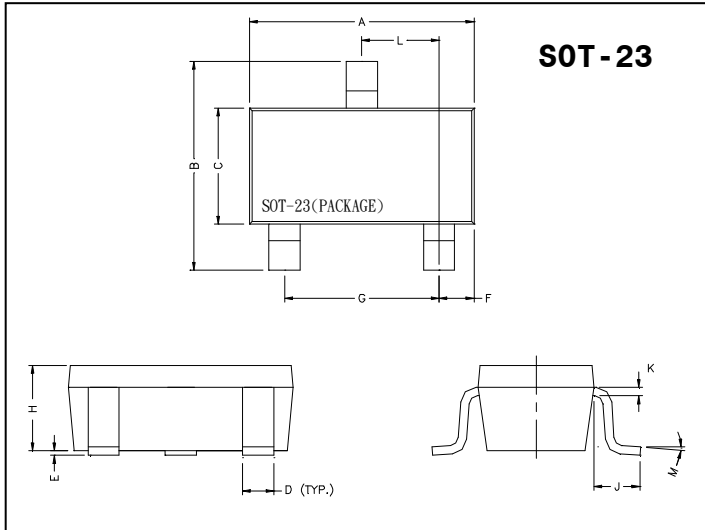
GMBT3019

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The GMBT3019 is designed for general purpose amplifier applications and switching requiring collector currents 1A.

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 at Ta = 25°C

| Parameter | Symbol | Ratings | Unit |
|------------------------------|--------|------------|------|
| Junction Temperature | Tj | +150 | °C |
| Storage Temperature | Tstg | -55 ~ +150 | °C |
| Collector to Base Voltage | VCBO | 140 | V |
| Collector to Emitter Voltage | VCEO | 80 | V |
| Emitter to Base Voltage | VEBO | 7 | V |
| Collector Current | IC | 1 | A |
| Total Power Dissipation | PD | 350 | mW |

Characteristics at Ta = 25°C

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|----------|------|------|------|------|-----------------------------|
| BVCBO | 140 | - | - | V | IC=100uA |
| BVCEO | 80 | - | - | V | IC=30mA |
| BVEBO | 7 | - | - | V | IE=100uA |
| ICBO | - | - | 50 | nA | VCB=90V |
| IEBO | - | - | 50 | nA | VEB=5V |
| VCE(sat) | - | - | 0.2 | V | IC=150mA, IB=15mA |
| VBE(sat) | - | - | 1.1 | V | IC=150mA, IB=15mA |
| hFE1 | 50 | - | - | | VCE=10V, IC=0.1mA |
| hFE2 | 90 | - | - | | VCE=10V, IC=10mA |
| hFE3 | 100 | - | 300 | | VCE=10V, IC=150mA |
| hFE4 | 50 | - | - | | VCE=10V, IC=500mA |
| hFE5 | 15 | - | - | | VCE=10V, IC=1000mA |
| fT | 100 | - | - | MHz | VCE=50mV, IC=50mA, f=100MHz |
| Cob | - | - | 12 | pF | VCE=10V, IE=0, f=1MHz |

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