

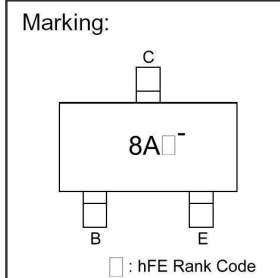
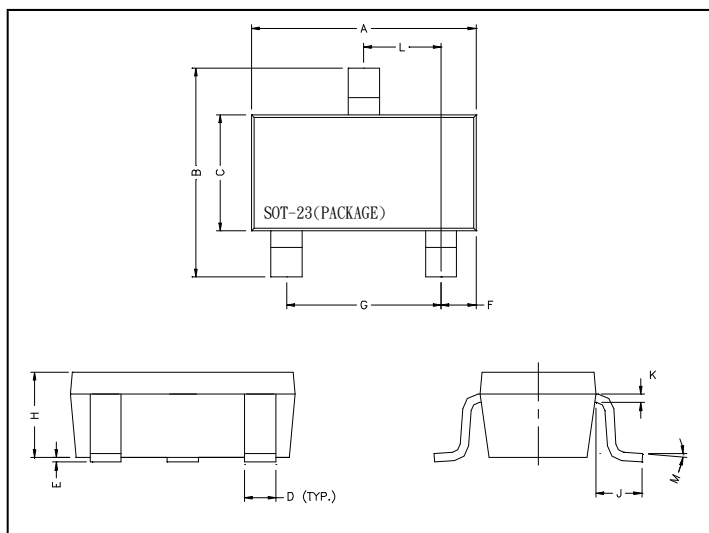
GBC846

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The GBC846 is designed for switching and AF amplifier application, suitable for automatic insertion in thick and thin-film circuits.

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 | 80 | V |
| Collector to Emitter Voltage | VCEO | 65 | V |
| Emitter to Base Voltage | VEBO | 6 | V |
| Collector Current | IC | 100 | mA |
| Total Power Dissipation | PD | 250 | mW |

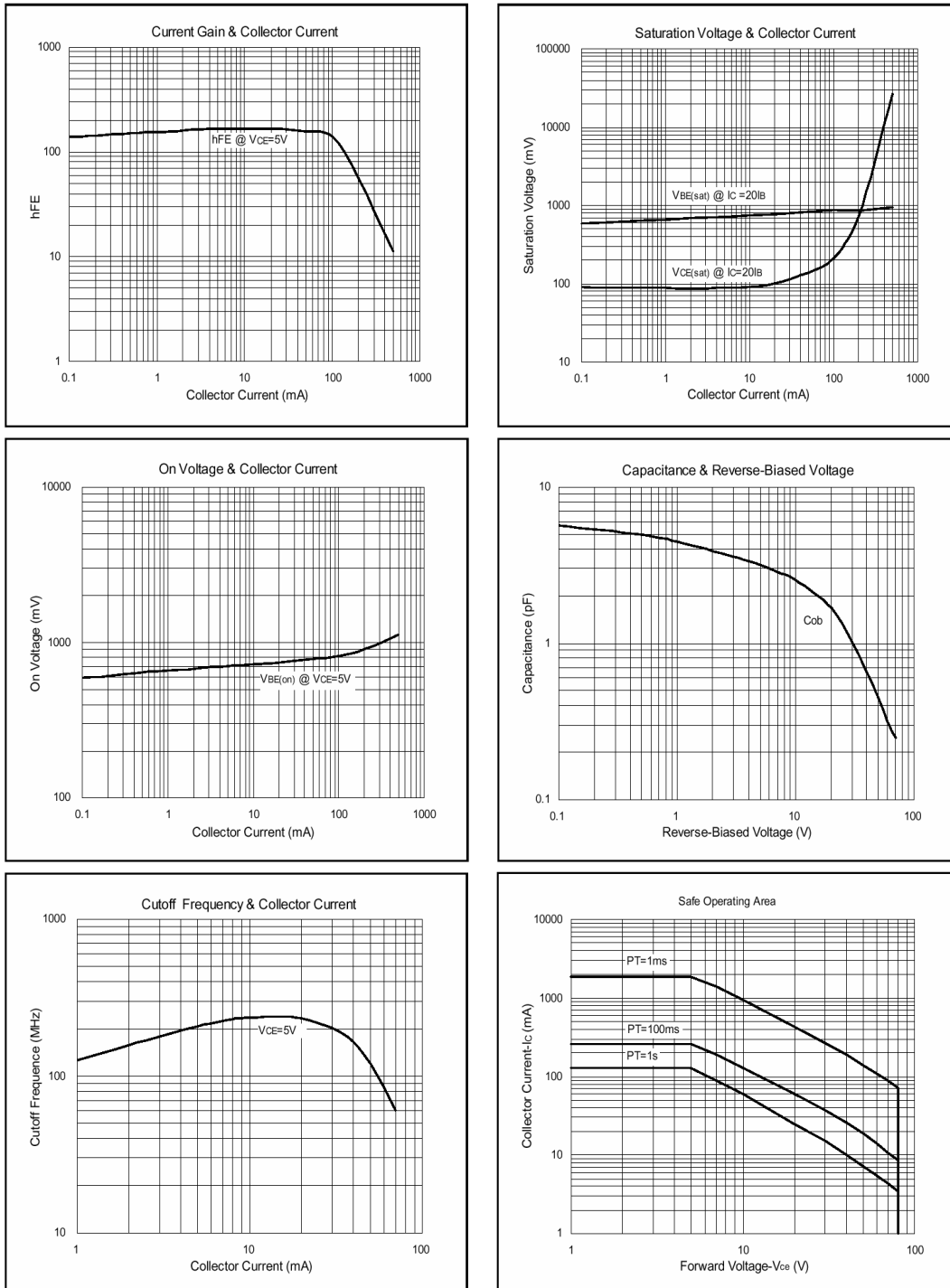
Characteristics at Ta = 25°C

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|-----------|------|------|------|------|------------------------|
| BVCBO | 80 | - | - | V | IC=100uA |
| BVCEO | 65 | - | - | V | IC=1mA |
| BVEBO | 6 | - | - | V | IE=10uA |
| ICBO | - | - | 15 | nA | VCB=30V |
| VCE(sat)1 | - | 90 | 250 | mV | IC=10mA, IB=0.5mA |
| VCE(sat)2 | - | 200 | 600 | mV | IC=100mA, IB=5mA |
| VBE(sat)1 | - | 700 | - | mV | IC=10mA, IB=0.5mA |
| VBE(sat)2 | - | 900 | - | mV | IC=100mA, IB=5mA |
| VBE(on)1 | 580 | - | 700 | mV | VCE=5V, IC=2mA |
| VBE(on)2 | - | - | 770 | mV | VCE=5V, IC=10mA |
| hFE | 110 | - | 800 | | VCE=5V, IC=2mA |
| fT | - | 300 | - | MHz | VCE=5V, IC=10mA |
| Cob | - | 3.5 | 6 | pF | VCB=10V, f=1MHz, IE=0A |

Classification Of hFE

| Rank | A | B | C |
|------|---------|---------|---------|
| hFE | 110-220 | 200-450 | 420-800 |

Characteristics Curve



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