



FUKUCOM COMPANY LTD.

福靈有限公司

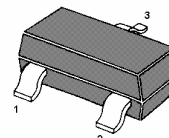
FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

MMBT5087

PNP Silicon Epitaxial Planar Transistor

for general purpose application



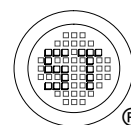
1.BASE 2.EMITTER 3.COLLECTOR
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

| Parameter | Symbol | Value | Unit |
|---------------------------|-------------------|---------------|------|
| Collector Base Voltage | -V _{CBO} | 50 | V |
| Collector Emitter Voltage | -V _{CEO} | 50 | V |
| Emitter Base Voltage | -V _{EBO} | 3 | V |
| Collector Current | -I _C | 100 | mA |
| Peak Collector Current | -I _{CM} | 200 | mA |
| Power Dissipation | P _{tot} | 200 | mW |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature Range | T _S | - 55 to + 150 | °C |

Characteristics at T_a = 25 °C

| Parameter | Symbol | Min. | Max. | Unit |
|--------------------------------------------------------------------------------------------|-----------------------|------|------|------|
| DC Current Gain at -V _{CE} = 5 V, -I _C = 100 μA | h _{FE} | 250 | 800 | - |
| at -V _{CE} = 5 V, -I _C = 1 mA | h _{FE} | 250 | - | - |
| at -V _{CE} = 5 V, -I _C = 10 mA | h _{FE} | 250 | - | - |
| Collector Cutoff Current at -V _{CB} = 35 V | -I _{CBO} | - | 50 | nA |
| Emitter Cutoff Current at -V _{EB} = 3 V | -I _{EBO} | - | 50 | nA |
| Collector Base Breakdown Voltage at -I _C = 100 μA | -V _{(BR)CBO} | 50 | - | V |
| Collector Emitter Breakdown Voltage at -I _C = 1 mA | -V _{(BR)CEO} | 50 | - | V |
| Emitter Base Breakdown Voltage at -I _E = 100 μA | -V _{(BR)EBO} | 3 | - | V |
| Collector Emitter Saturation Voltage at -I _C = 10 mA, -I _B = 1 mA | -V _{CE(sat)} | - | 0.3 | V |
| Base Emitter On Voltage at -V _{CE} = 5 V, -I _C = 1 mA | -V _{BE(on)} | - | 0.85 | V |
| Transition Frequency at -V _{CE} = 5 V, I _E = 0.5 mA, f = 100 MHz | f _T | 40 | - | MHz |
| Collector Base Capacitance at -V _{CE} = 5 V, I _E = 0, f = 100 KHz | C _{cb} | - | 4 | pF |



Dated : 26/04/2007



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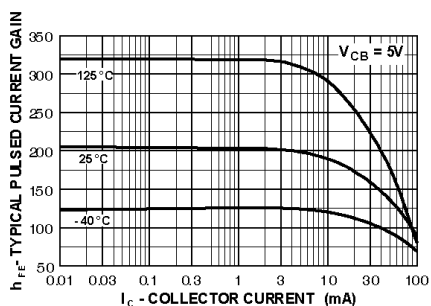


Figure 1. Typical Pulsed Current Gain vs Collector Current

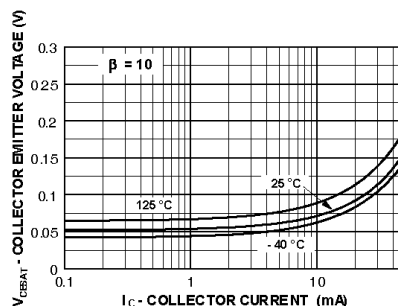


Figure 2. Collector-Emitter Saturation Voltage vs Collector Current

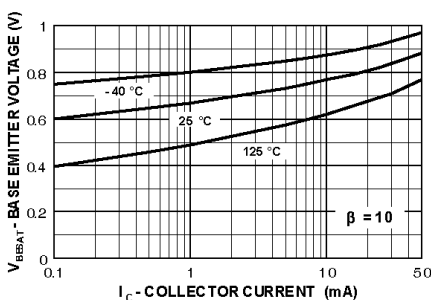


Figure 3. Base-Emitter Saturation Voltage vs Collector Current

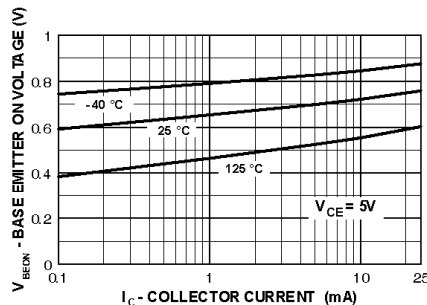


Figure 4. Base-Emitter On Voltage vs Collector Current

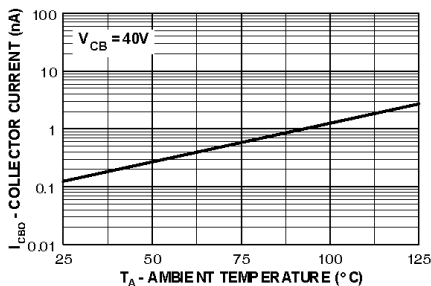


Figure 5. Collector Cutoff Current vs Ambient Temperature

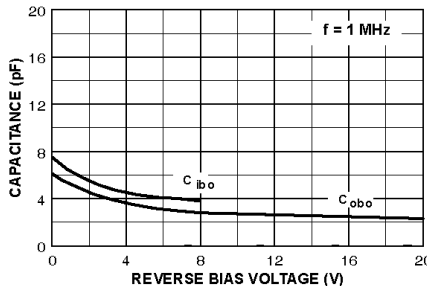


Figure 6. Input and Output Capacitance vs Reverse Voltage

