



FUKUCOM COMPANY LTD.

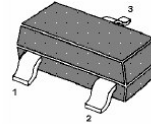
福靈有限公司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.
TEL: 852-2790 0314 FAX: 852-2790 0206

MMBT5401

PNP Silicon Epitaxial Planar Transistor

for high voltage amplifier applications



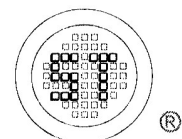
1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

| Parameter | Symbol | Value | Unit |
|------------------------------|-------------------|---------------|------|
| Collector Base Voltage | -V _{CBO} | 160 | V |
| Collector Emitter Voltage | -V _{CEO} | 150 | V |
| Emitter Base Voltage | -V _{EBO} | 5 | V |
| Collector Current Continuous | -I _C | 600 | 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 = 1 mA | h _{FE} | 50 | - | - |
| at -V _{CE} = 5 V, -I _C = 10 mA | h _{FE} | 60 | 240 | - |
| at -V _{CE} = 5 V, -I _C = 50 mA | h _{FE} | 50 | - | - |
| Collector Cutoff Current at -V _{CB} = 120 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} | 160 | - | V |
| Collector Emitter Breakdown Voltage at -I _C = 1 mA | -V _{(BR)CEO} | 150 | - | V |
| Emitter Base Breakdown Voltage at -I _E = 10 μA | -V _{(BR)EBO} | 5 | - | V |
| Collector Emitter Saturation Voltage at -I _C = 10 mA, -I _B = 1 mA | -V _{CE(sat)} | - | 0.2 | V |
| at -I _C = 50 mA, -I _B = 5 mA | -V _{CE(sat)} | - | 0.5 | V |
| Base Emitter Saturation Voltage at -I _C = 10 mA, -I _B = 1 mA | -V _{BE(sat)} | - | 1 | V |
| at -I _C = 50 mA, -I _B = 5 mA | -V _{BE(sat)} | - | 1 | V |
| Gain Bandwidth Product at -V _{CE} = 10 V, -I _C = 10 mA, f = 100 MHz | f _T | 100 | 300 | MHz |
| Output Capacitance at -V _{CB} = 10 V, f = 1 MHz | C _{ob0} | - | 6 | pF |



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Dated : 08/03/2007



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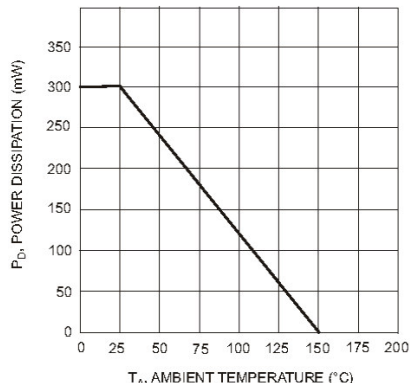


Fig. 1, Max Power Dissipation vs Ambient Temperature

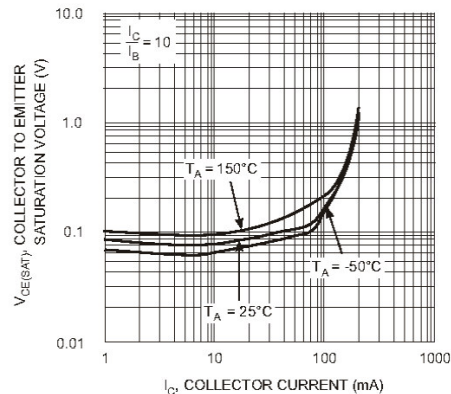


Fig. 2, Collector Emitter Saturation Voltage vs. Collector Current

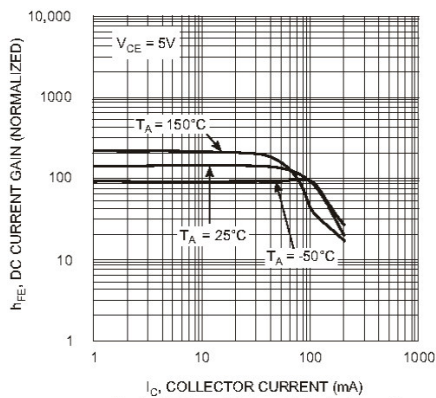


Fig. 3, DC Current Gain vs. Collector Current

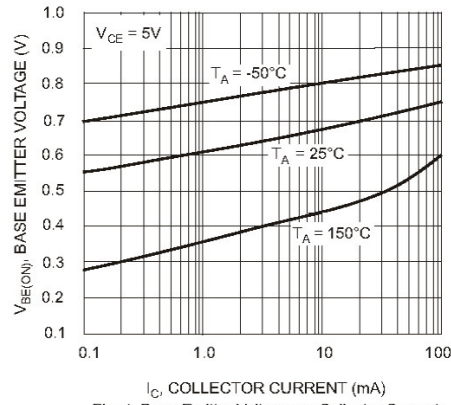


Fig. 4, Base Emitter Voltage vs. Collector Current

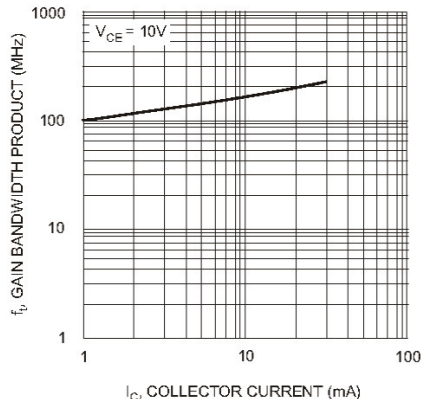
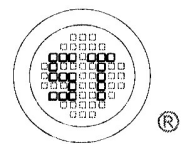


Fig. 5, Gain Bandwidth Product vs Collector Current



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