

G2N5401 PNP EPITAXIAL PLANAR TRANSISTOR

Description

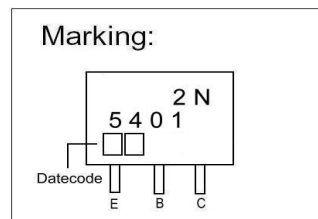
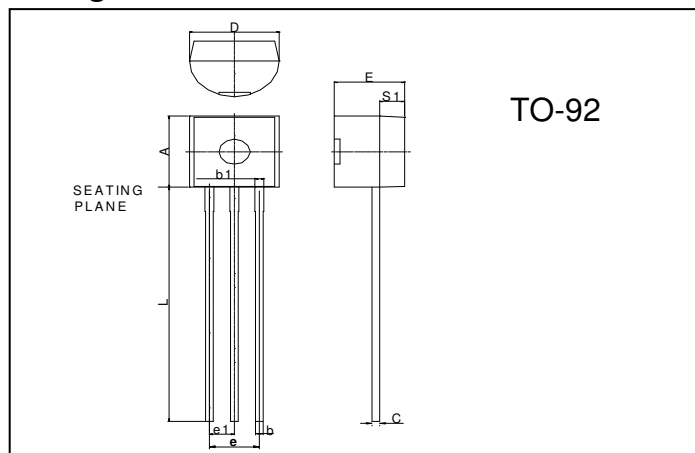
The G2N5401 is designed for general purpose applications requiring high breakdown voltages.

Features

*Complementary to NPN Type G2N5551

*High Collector-Emitter Breakdown Voltage ($V_{CE0}=150V@I_C=1mA$)

Package Dimensions



| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|------|------|------------|-------|
| | Min. | Max. | | Min. | Max. |
| A | 4.45 | 4.7 | D | 4.44 | 4.7 |
| S1 | 1.02 | - | E | 3.30 | 3.81 |
| b | 0.36 | 0.51 | L | 12.70 | - |
| b1 | 0.36 | 0.76 | e1 | 1.150 | 1.390 |
| C | 0.36 | 0.51 | e | 2.42 | 2.66 |

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Ratings | Unit |
|------------------------------|-----------|------------|------------------|
| Junction Temperature | T_j | +150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -55 ~ +150 | $^\circ\text{C}$ |
| Collector to Base Voltage | V_{CBO} | -160 | V |
| Collector to Emitter Voltage | V_{CEO} | -150 | V |
| Emitter to Base Voltage | V_{EBO} | -5 | V |
| Collector Current | I_C | -600 | mA |
| Total Power Dissipation | P_D | 625 | mW |

Characteristics at $T_a = 25^\circ\text{C}$

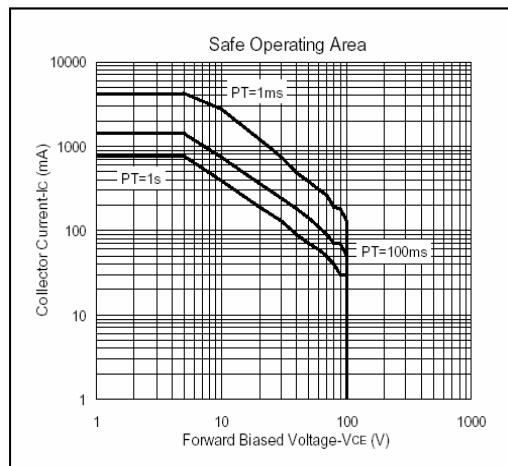
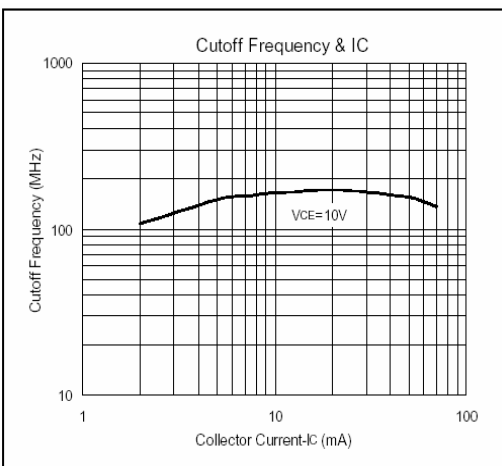
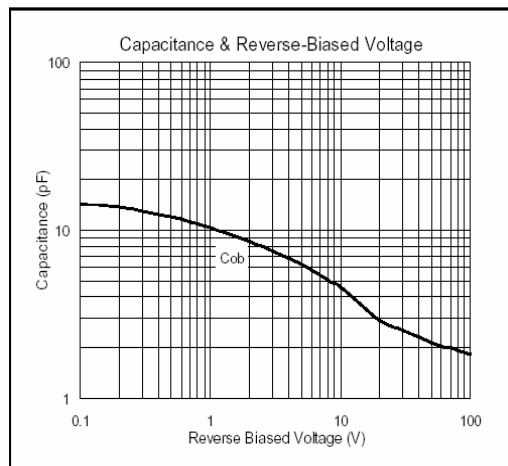
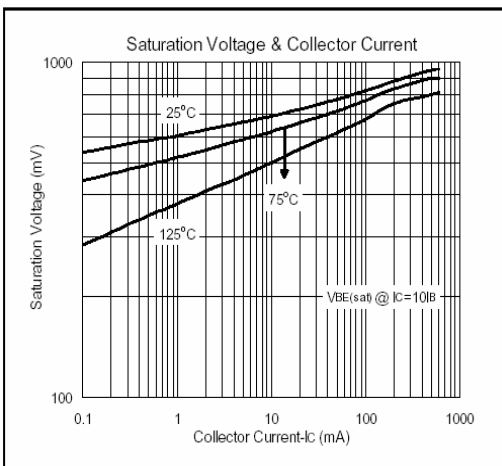
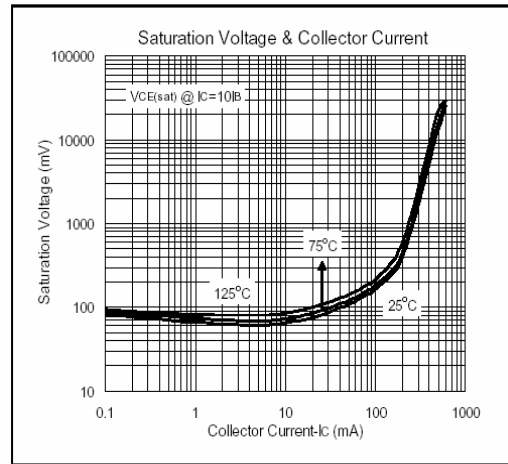
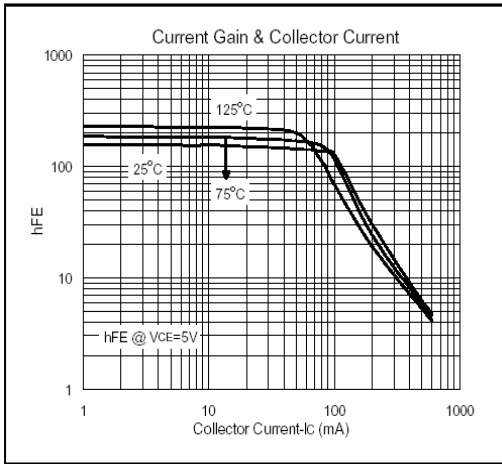
| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|------------------|------|------|------|------|------------------------------------|
| V_{CBO} | -160 | - | - | V | $I_C=-100\mu A, I_E=0$ |
| V_{CEO} | -150 | - | - | V | $I_C=-1mA, I_B=0$ |
| V_{EBO} | -5 | - | - | V | $I_E=-10\mu A, I_C=0$ |
| I_{CBO} | - | - | -50 | nA | $V_{CB}=-120V, I_E=0$ |
| I_{EBO} | - | - | -50 | nA | $V_{EB}=-3V, I_C=0$ |
| * $V_{CE(sat)1}$ | - | - | -0.2 | V | $I_C=-10mA, I_B=-1mA$ |
| * $V_{CE(sat)2}$ | - | - | -0.5 | mV | $I_C=-50mA, I_B=-5mA$ |
| * $V_{BE(sat)1}$ | - | - | -1 | V | $I_C=-10mA, I_B=-1mA$ |
| * $V_{BE(sat)2}$ | - | - | -1 | V | $I_C=-50mA, I_B=-5mA$ |
| * h_{FE1} | 50 | - | - | | $V_{CE}=-5V, I_B=-1mA$ |
| * h_{FE2} | 80 | 160 | 400 | | $V_{CE}=-5V, I_C=-10mA$ |
| * h_{FE3} | 50 | - | - | | $V_{CE}=-5V, I_C=-50mA$ |
| f_T | 100 | - | 300 | MHz | $V_{CE}=-10V, I_C=-10mA, f=100MHz$ |
| C_{ob} | - | - | 6 | pF | $V_{CB}=-10V, f=1MHz, I_E=0$ |

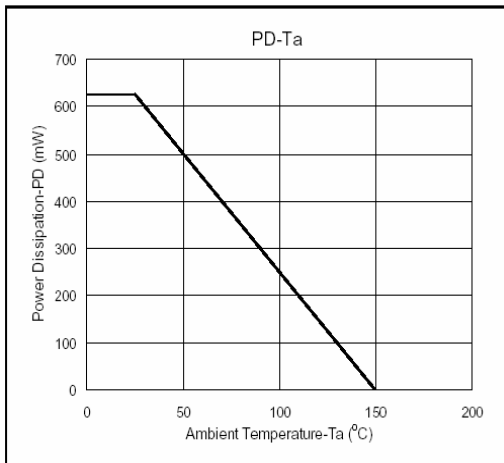
* Pulse Test: Pulse Width $\leq 380\mu s$, Duty Cycle $\leq 2\%$

Classification Of h_{FE2}

| Rank | A | N | C |
|-------|--------|---------|---------|
| Range | 80-200 | 100-240 | 160-400 |

Characteristics Curve





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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