

GJ1182

PNP SILICON EPITAXIAL PLANAR TRANSISTOR

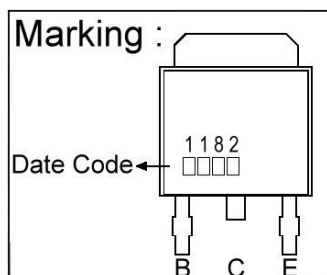
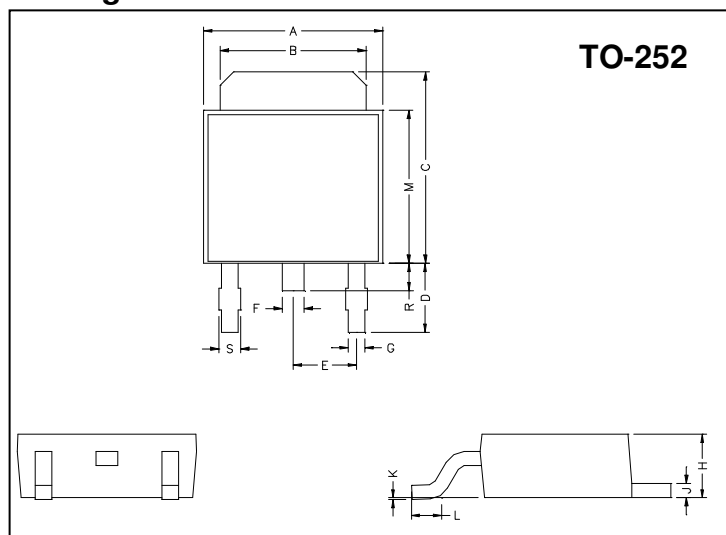
Description

The GJ1182 is designed for medium power amplifier applications.

Features

- Low collector saturation voltage : $V_{CE(sat)} = -0.5V$ (Typ.)

Package Dimensions



| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|------|------|------------|------|
| | Min. | Max. | | Min. | Max. |
| A | 6.40 | 6.80 | G | 0.50 | 0.70 |
| B | 5.20 | 5.50 | H | 2.20 | 2.40 |
| C | 6.80 | 7.20 | J | 0.45 | 0.55 |
| D | 2.40 | 3.00 | K | 0 | 0.15 |
| E | 2.30 REF. | | L | 0.90 | 1.50 |
| F | 0.70 | 0.90 | M | 5.40 | 5.80 |
| S | 0.60 | 0.90 | R | 0.80 | 1.20 |

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} | -40 | V |
| Collector to Emitter Voltage | V_{CEO} | -32 | V |
| Emitter to Base Voltage | V_{EBO} | -5 | V |
| Collector Current | I_C | -2 | A |
| Collector Current (Pulse, $P_w=100\text{ms}$) | I_C | -3 | A |
| Total Power Dissipation($T_c=25^\circ\text{C}$) | P_D | 10 | W |

Electrical Characteristics ($T_a = 25^\circ\text{C}$, unless otherwise noted)

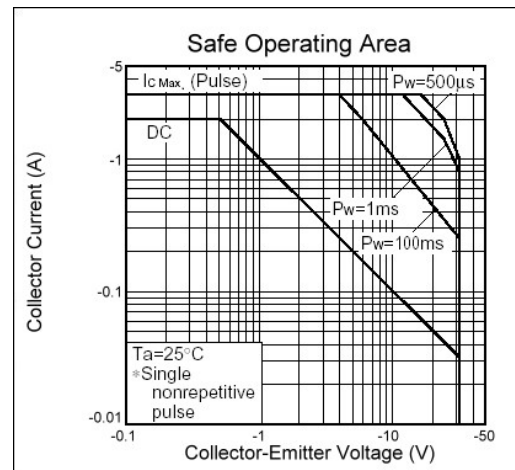
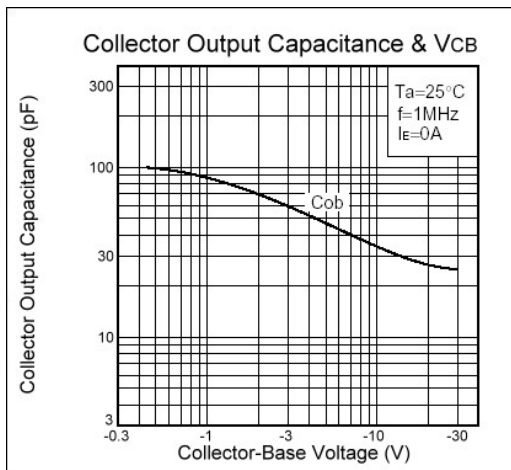
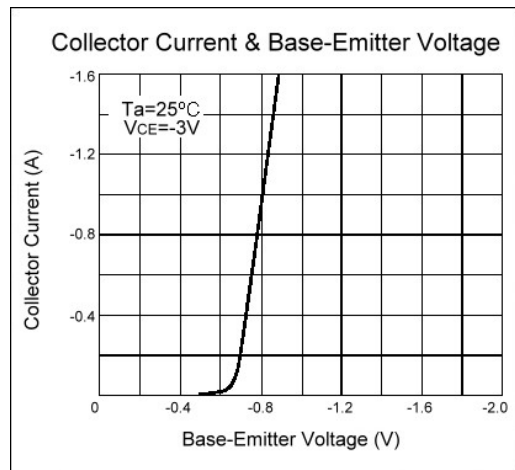
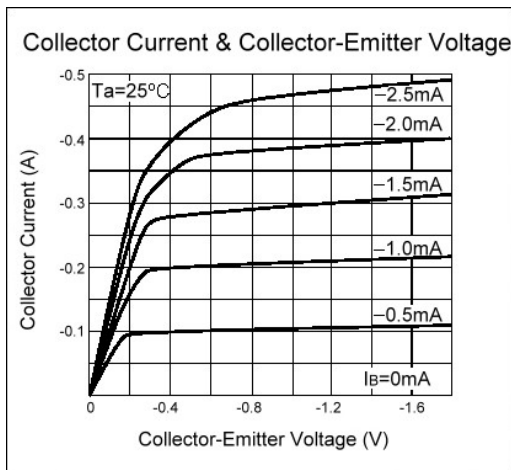
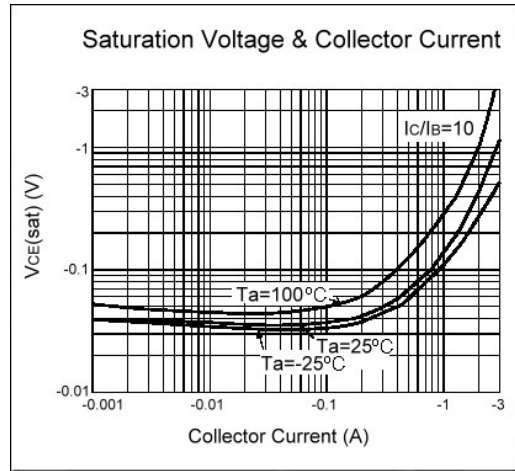
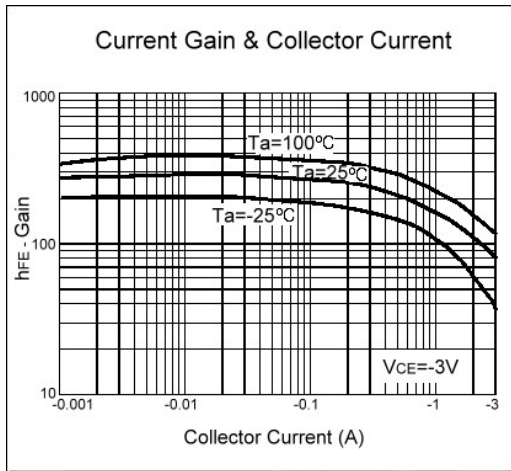
| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|-----------------|------|------|------|---------------|---|
| V_{CBO} | -40 | - | - | V | $I_C = -50\mu\text{A}$, $I_E = 0$ |
| V_{CEO} | -32 | - | - | V | $I_C = -1\text{mA}$, $I_B = 0$ |
| V_{EBO} | -5 | - | - | V | $I_E = -50\mu\text{A}$, $I_C = 0$ |
| I_{CBO} | - | - | -1 | μA | $V_{CB} = -20\text{V}$, $I_E = 0$ |
| I_{EBO} | - | - | -1 | μA | $V_{EB} = -4\text{V}$, $I_C = 0$ |
| * $V_{CE(sat)}$ | - | -500 | -800 | mV | $I_C = -2\text{A}$, $I_B = -200\text{mA}$ |
| * h_{FE} | 82 | - | 390 | | $V_{CE} = -3\text{V}$, $I_C = -500\text{mA}$ |
| f_T | - | 100 | - | MHz | $V_{CE} = -5\text{V}$, $I_C = -500\text{mA}$, $f = 100\text{MHz}$ |
| C_{ob} | - | 50 | - | pF | $V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$ |

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

Classification Of h_{FE}

| Rank | P | Q | R |
|-------|----------|-----------|-----------|
| Range | 82 ~ 180 | 120 ~ 270 | 180 ~ 390 |

Characteristics Curve



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