**GTM** CORPORATION

ISSUED DATE :2004/12/15
REVISED DATE :2005/12/23B

# GJ127 PNP EPITAXIAL PLANAR TRANSISTOR

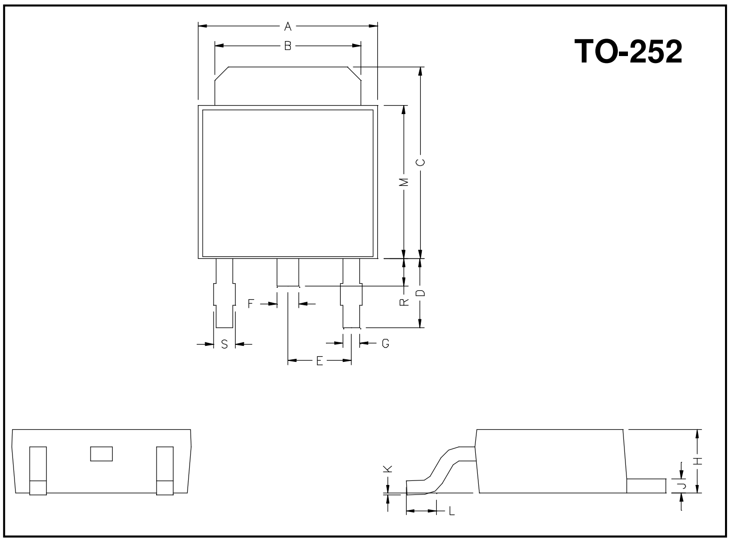
## Description

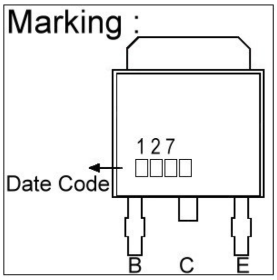
The GJ127 is designed for use in general purposes and low speed switching applications.

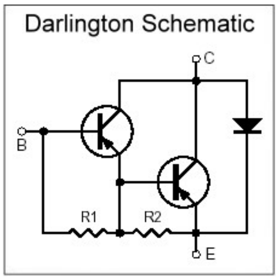
## Features

- High DC current gain
- Built-in a damper diode at E-C

## 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 Ta = 25℃

| Parameter | Symbol | Ratings | Unit |
|---|---|---|---|
| Junction Temperature | Tj | +150 | ℃ |
| Storage Temperature | Tstg | -55 ~ +150 | ℃ |
| Collector to Base Voltage | BVCBO | -100 | V |
| Collector to Emitter Voltage | BVCEO | -100 | V |
| Emitter to Base Voltage | BVEBO | -5 | V |
| Collector Current | IC | -5 | A |
| Total Power Dissipation(Tc=25℃) | PD | 20 | W |

## Electrical Characteristics (Rating at 25℃ ambient temperature unless otherwise specified)

| Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|---|---|---|---|---|---|
| $BV_{CBO}$ | -100 | - | - | V | $I_C$=-1mA, $I_E$=0 |
| $BV_{CEO}$ | -100 | - | - | V | $I_C$=-30mA, $I_B$=0 |
| $BV_{EBO}$ | -5 | - | - | V | $I_E$=-1mA, $I_C$=0 |
| $I_{CBO}$ | - | - | -10 | μA | $V_{CB}$=-100V, $I_E$=0 |
| $I_{CEX}$ | - | - | -10 | μA | $V_{CE}$=-100V, $V_{BE(off)}$=-1.5V |
| $I_{EBO}$ | - | - | -2 | mA | $V_{EB}$=-5V, $I_C$=0 |
| *$V_{CE(sat)}$1 | - | - | -2 | V | $I_C$=-3A, $I_B$=-12mA |
| *$V_{CE(sat)}$2 | - | - | -4 | V | $I_C$=-5A, $I_B$=-20mA |
| *$V_{BE(sat)}$ | - | - | -4 | V | $I_C$=-5A, $I_B$=-50mA |
| *$V_{BE(on)}$ | - | - | -2.8 | V | $V_{CE}$=-3V, $I_C$=-3A |
| *$h_{FE}$1 | 1 | - | - | K | $V_{CE}$=-3V, $I_C$=-500mA |
| *$h_{FE}$2 | 1 | - | - | K | $V_{CE}$=-3V, $I_C$=-3A |
| Cob | - | - | 300 | pF | $V_{CB}$=-10V, f=0.1MHz |

* Pulse Test: Pulse Width≦380μs, Duty Cycle≦2%

## Characteristics Curve