## DESCRIPTION

·With TO-3PN package

·Complement to type 2SD586

## APPLICATIONS

·For power amplifier applications

### PINNING

| PIN | DESCRIPTION |
|---|---|
| 1 | Base |
| 2 | Collector;connected to mounting base |
| 3 | Emitter |

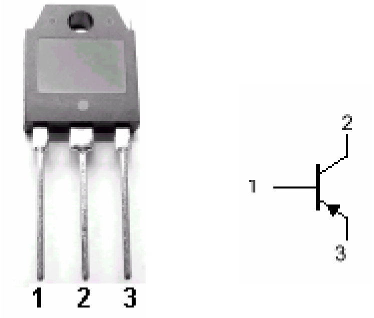

**Fig.1 simplified outline (TO-3PN) and symbol**

### Absolute maximum ratings(Tc=25□)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|---|---|---|---|---|
| $V_{CBO}$ | Collector-base voltage | Open emitter | -100 | V |
| $V_{CEO}$ | Collector-emitter voltage | Open base | -100 | V |
| $V_{EBO}$ | Emitter-base voltage | Open collector | -5 | V |
| $I_C$ | Collector current | | -5 | A |
| $P_C$ | Collector power dissipation | $T_C$=25□ | 60 | W |
| $T_j$ | Junction temperature | | 150 | □ |
| $T_{stg}$ | Storage temperature | | -55~150 | □ |

## CHARACTERISTICS

**Tj=25 unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)CEO}$ | Collector-emitter breakdown voltage | $I_C$=-30mA ;$I_B$=0 | -100 | | | V |
| $V_{(BR)CBO}$ | Collector-base breakdown voltage | $I_C$=-1mA ;$I_E$=0 | -100 | | | V |
| $V_{(BR)EBO}$ | Emitter-base breakdown voltage | $I_E$=-1mA ;$I_C$=0 | -5 | | | V |
| $V_{CEsat}$ | Collector-emitter saturation voltage | $I_C$=-3A ;$I_B$=-0.3A | | | -1.5 | V |
| $V_{BE}$ | Base-emitter on voltage | $I_C$=-1A;$V_{CE}$=-5V | | | -1.5 | V |
| $I_{CBO}$ | Collector cut-off current | $V_{CB}$=-100V; $I_E$=0 | | | -0.1 | mA |
| $I_{EBO}$ | Emitter cut-off current | $V_{EB}$=-5V; $I_C$=0 | | | -0.1 | mA |
| $h_{FE-1}$ | DC current gain | $I_C$=-1A ; $V_{CE}$=-5V | 50 | | | |
| $f_T$ | Transition frequency | $I_C$=-1A ; $V_{CE}$=-5V | | 11 | | MHz |
| $C_{OB}$ | Collector output capacitance | $I_E$=0;f=1MHz;$V_{CB}$=-10V | | 140 | | pF |

### PACKAGE OUTLINE

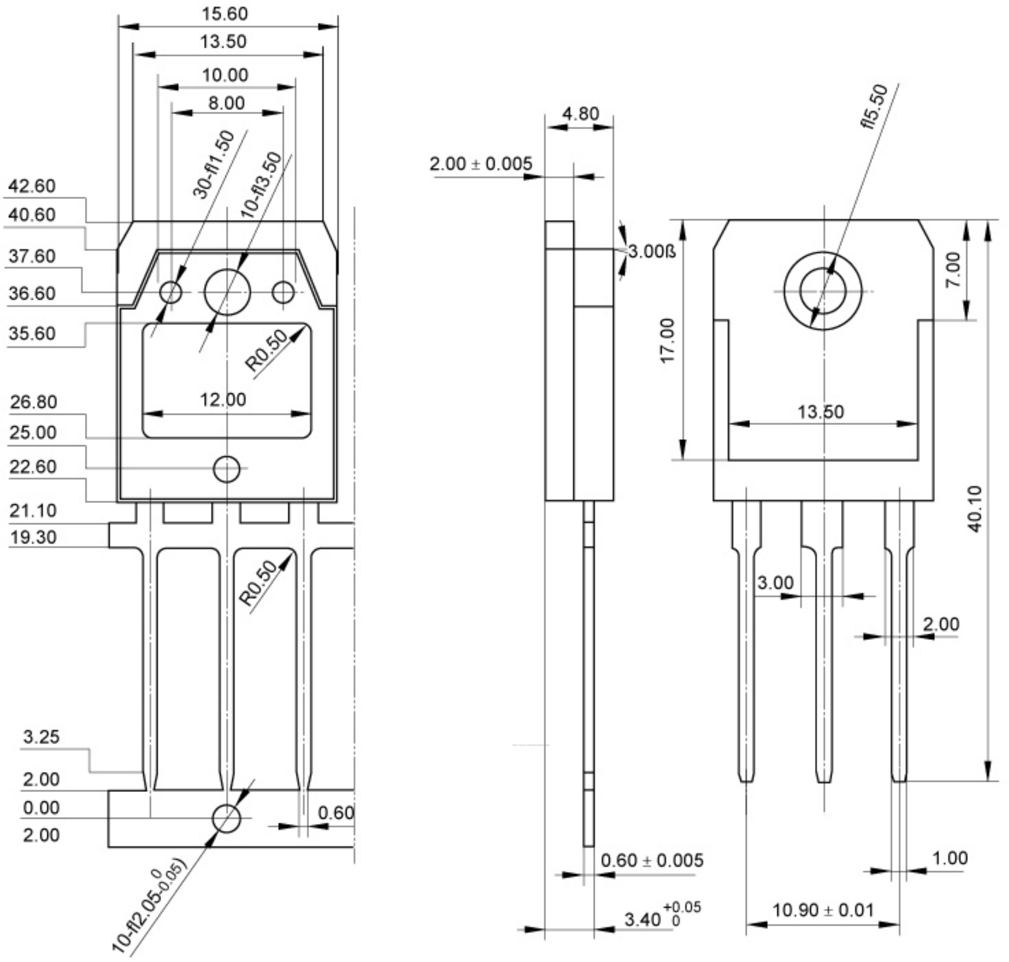

Fig.2 outline dimensions