

Silicon PNP Darlington Power Transistors

2SB1558

DESCRIPTION

- With TO-3PI package
- Complement to type 2SD2387

APPLICATIONS

- For power amplifier applications

PINNING

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

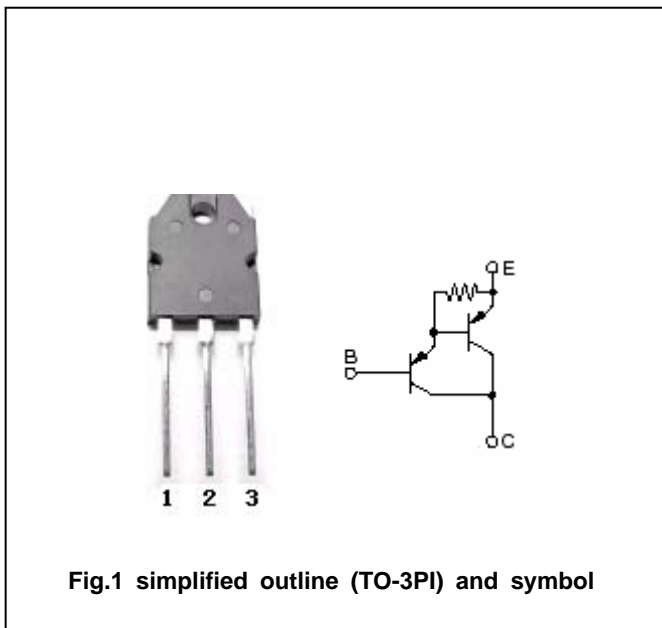


Fig.1 simplified outline (TO-3PI) and symbol

Absolute maximum ratings(Ta=)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|--------------------|---------|------|
| V _{CB0} | Collector-base voltage | Open emitter | -140 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -140 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I _C | Collector current | | -8 | A |
| I _B | Base current | | -0.1 | A |
| P _C | Collector power dissipation | T _C =25 | 80 | W |
| T _j | Junction temperature | | 150 | |
| T _{stg} | Storage temperature | | -55~150 | |

Silicon PNP Darlington Power Transistors

2SB1558

CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|------|------|-------|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | I _C =-50mA ; I _B =0 | -140 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-7A ; I _B =-7mA | | | -2.5 | V |
| V _{BE} | Base-emitter on voltage | I _C =-7A ; V _{CE} =-5V | | | -3.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-140V; I _E =0 | | | -5 | μ A |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V; I _C =0 | | | -5 | μ A |
| h _{FE-1} | DC current gain | I _C =-7A ; V _{CE} =-5V | 5000 | | 30000 | |
| h _{FE-2} | DC current gain | I _C =-12A ; V _{CE} =-5V | 2000 | | | |
| C _{ob} | Output capacitance | I _E =0 ; V _{CB} =-10V;f=1MHz | | 170 | | pF |
| f _T | Transition frequency | I _C =-1A ; V _{CE} =-5V | | 30 | | MHz |

◆ **h_{FE-1} Classifications**

| A | B | C |
|------------|------------|-------------|
| 5000-12000 | 9000-18000 | 15000-30000 |

Silicon PNP Darlington Power Transistors

2SB1558

PACKAGE OUTLINE

