

Silicon PNP Power Transistors

2SA1553

DESCRIPTION

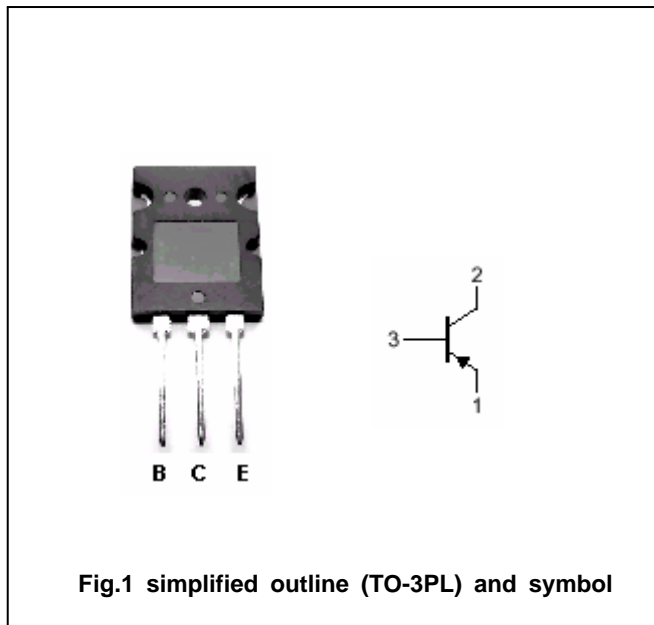
- With TO-3PL package
- Complement to type 2SC4029

APPLICATIONS

- Power amplifier applications
- Recommended for 120W high fidelity audio frequency amplifier output stage

PINNING

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



Absolute maximum ratings(Ta=25)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|--------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | -230 | V |
| V _{CEO} | Collector-emitter voltage | Open base | -230 | V |
| V _{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I _C | Collector current | | -15 | A |
| I _B | Base current | | -1.5 | A |
| P _C | Collector power dissipation | T _C =25 | 150 | W |
| T _j | Junction temperature | | 150 | |
| T _{stg} | Storage temperature | | -55~150 | |

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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 | -230 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-8A ; I _B =-0.8A | | | -3.0 | V |
| V _{BE} | Base-emitter on voltage | I _C =-7A ; V _{CE} =-5V | | | -1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-230V ; 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 =-1A ; V _{CE} =-5V | 55 | | 160 | |
| h _{FE-2} | DC current gain | I _C =-7A ; V _{CE} =-5V | 35 | | | |
| f _T | Transition frequency | I _C =-1A ; V _{CE} =-5V | | 25 | | MHz |
| C _{OB} | Collector output capacitance | I _C =0 ; f=1MHz ; V _{CB} =-10V | | 470 | | pF |

◆ h_{FE-1} classifications

| R | O |
|--------|--------|
| 55-110 | 80-160 |

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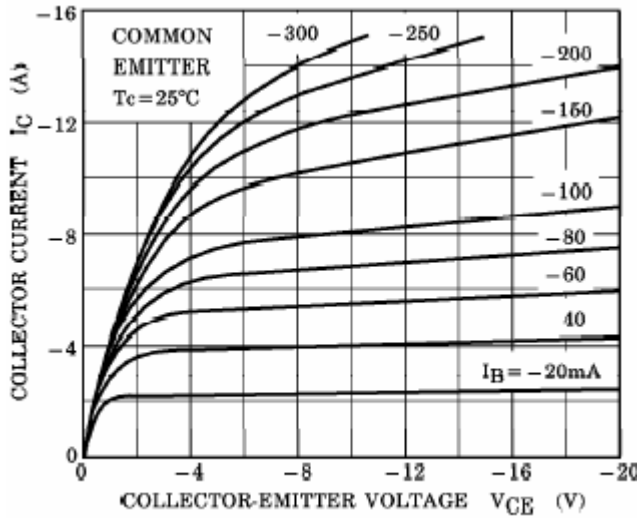


Fig.3 Static Characteristic

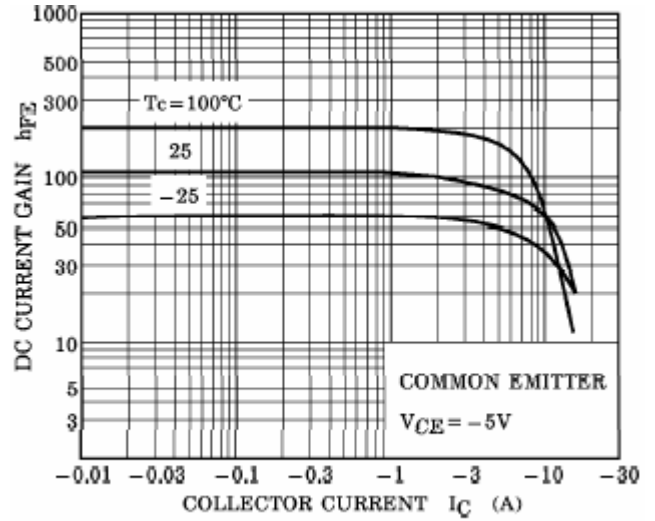


Fig.4 DC current Gain

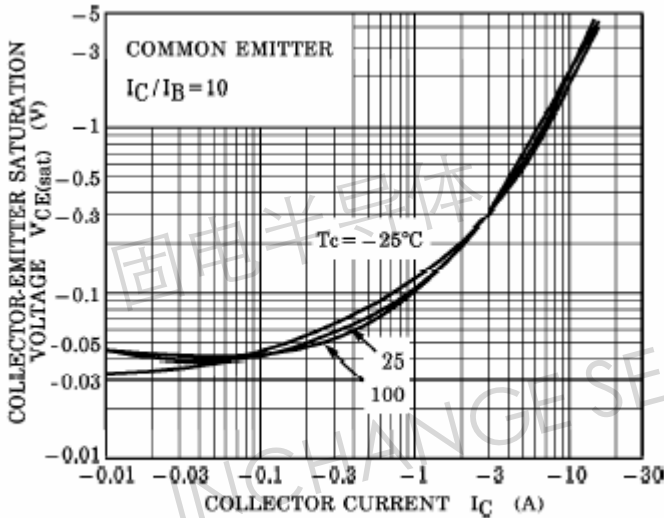


Fig.5 Collector-Emitter Saturation Voltage

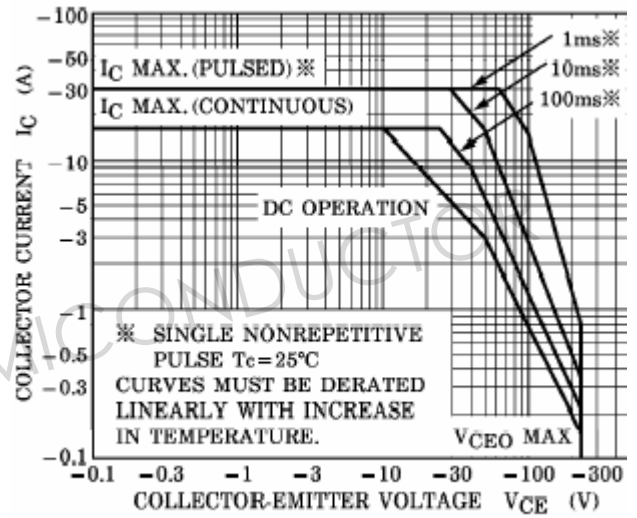


Fig.6 Safe Operating Area