

Silicon NPN Power Transistors

2SC2682

DESCRIPTION

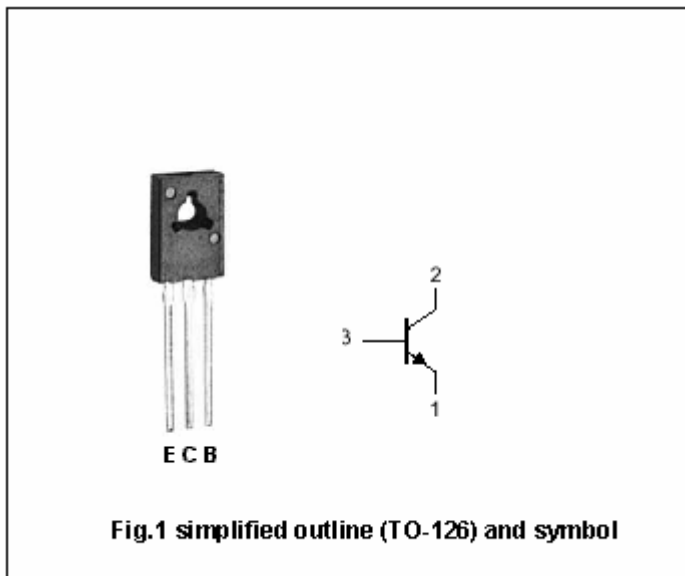
- With TO-126 package
- Complement to type 2SA1142

APPLICATIONS

- Audio frequency power amplifier; high frequency power amplifier applications

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 | 180 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 180 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I_C | Collector current | | 0.1 | A |
| P_C | Collector power dissipation | $T_a=25$ | 1.2 | W |
| | | $T_C=25$ | 10 | |
| 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 _{CEsat} | Collector-emitter saturation voltage | I _C =50mA; I _B =5mA | | 0.12 | 0.5 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =50mA; I _B =5mA | | 0.8 | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =180V; I _E =0 | | | 1 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =3V; I _C =0 | | | 1 | μA |
| h _{FE-1} | DC current gain | I _C =1mA; V _{CE} =5V | 90 | 190 | | |
| h _{FE-2} | DC current gain | I _C =10mA; V _{CE} =5V | 100 | 200 | 320 | |
| f _T | Transition frequency | I _C =20mA; V _{CE} =10V | | 200 | | MHz |
| C _{ob} | Output capacitance | I _E =0; V _{CB} =10V; f=1MHz | | 3.2 | | pF |

◆ h_{FE-2} Classifications

| Q | P |
|---------|---------|
| 100-200 | 160-320 |

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PACKAGE OUTLINE

