

Silicon NPN Power Transistors

2SC2987

DESCRIPTION

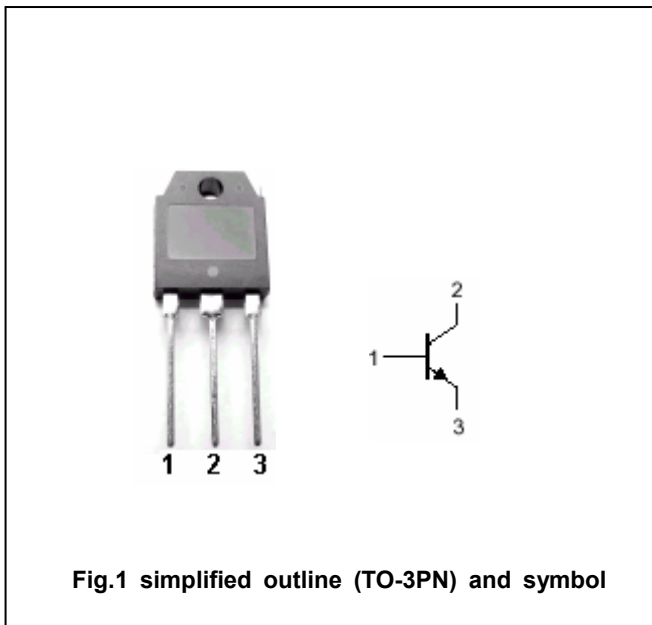
- With TO-3PN package
- Complement to type 2SA1227
- High power dissipation

APPLICATIONS

- For audio frequency power amplifier applications

PINNING

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



Absolute maximum ratings(Ta=25°C)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|----------------------|---------|------|
| V _{CBO} | 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 (DC) | | 12 | A |
| I _{CM} | Collector current-peak | | 20 | A |
| P _C | Collector power dissipation | T _C =25°C | 120 | W |
| T _j | Junction temperature | | 150 | °C |
| T _{stg} | Storage temperature | | -55~150 | °C |

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CHARACTERISTICS

T_j=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|--------------------|--------------------------------------|---|-----|------|-----|------|
| V _{CEsat} | Collector-emitter saturation voltage | I _C =5A ; I _B =0.5A | | 0.6 | 1.5 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =5A ; I _B =0.5A | | 1.4 | 2.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =140V; I _E =0 | | | 50 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =3V; I _C =0 | | | 50 | μA |
| h _{FE-1} | DC current gain | I _C =2A ; V _{CE} =5V | 60 | | 320 | |
| h _{FE-2} | DC current gain | I _C =5A ; V _{CE} =5V | 40 | | | |
| f _T | Transition frequency | I _C =1A ; V _{CE} =5V | | 50 | | MHz |
| C _{OB} | Collector output capacitance | I _E =0; f=1MHz; V _{CB} =10V | | 190 | | pF |

◆ h_{FE-1} Classifications

| R | Q | P |
|--------|---------|---------|
| 60-120 | 100-200 | 160-320 |

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PACKAGE OUTLINE

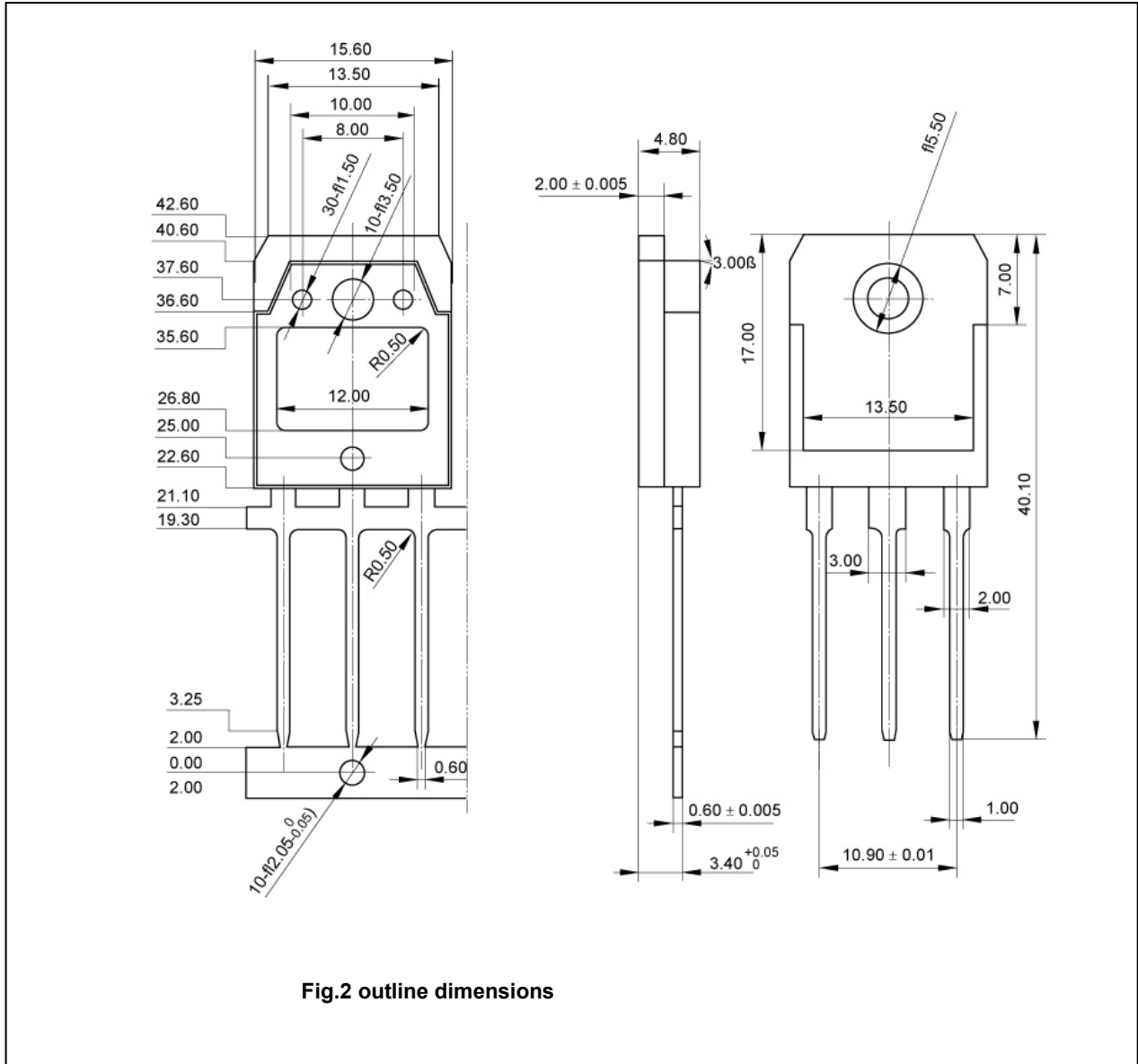


Fig.2 outline dimensions