

Silicon PNP Power Transistors

2SA1227 2SA1227A

DESCRIPTION

- With TO-3PFa package
- Complement to type 2SC2987/2987A
- High power dissipation

APPLICATIONS

- For use in audio frequency power amplifier applications

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Base |
| 2 | Collector |
| 3 | Emitter |

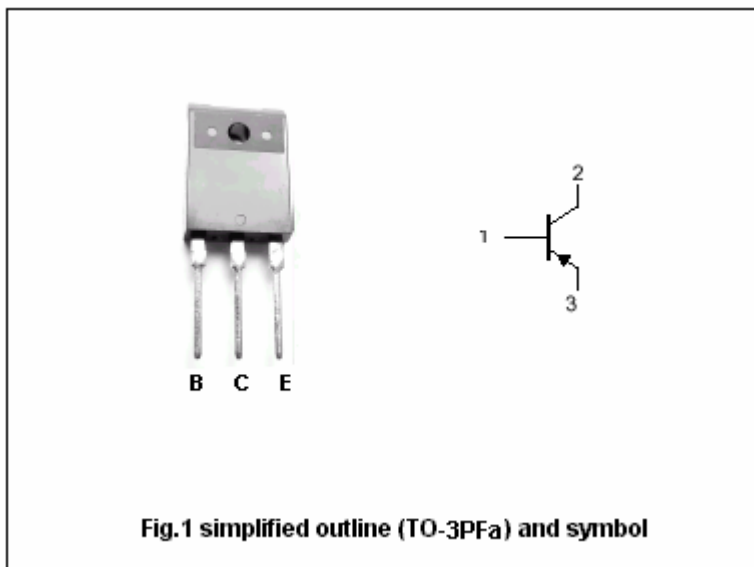


Fig.1 simplified outline (TO-3PFa) and symbol

Absolute maximum ratings(Ta=25°C)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|---------------------------|----------------------|---------|------|
| V _{CBO} | Collector-base voltage | 2SA1227 | -140 | V |
| | | 2SA1227A | -160 | |
| V _{CEO} | Collector-emitter voltage | 2SA1227 | -140 | V |
| | | 2SA1227A | -160 | |
| V _{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I _C | Collector current | | -12 | A |
| I _{CM} | Collector current-peak | | -20 | A |
| P _T | Total 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 | | -0.8 | -1.5 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =-5A ; I _B =-0.5A | | -1.5 | -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 | | | |
| C _{OB} | Output capacitance | I _E =0 ; V _{CB} =-10V; f=1MHz | | 280 | | pF |
| f _T | Transition frequency | I _C =-1A ; V _{CE} =-5V | | 60 | | MHz |

◆ h_{FE-1} classifications

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

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PACKAGE OUTLINE



Fig.2 Outline dimensions (unindicated tolerance:±0.30mm)