

Silicon PNP Power Transistors

2SA1116

DESCRIPTION

- With TO-3 package
- Complement to type 2SC2607

APPLICATIONS

- For power switching amplifier and general purpose applications

PINNING(see Fig.2)

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

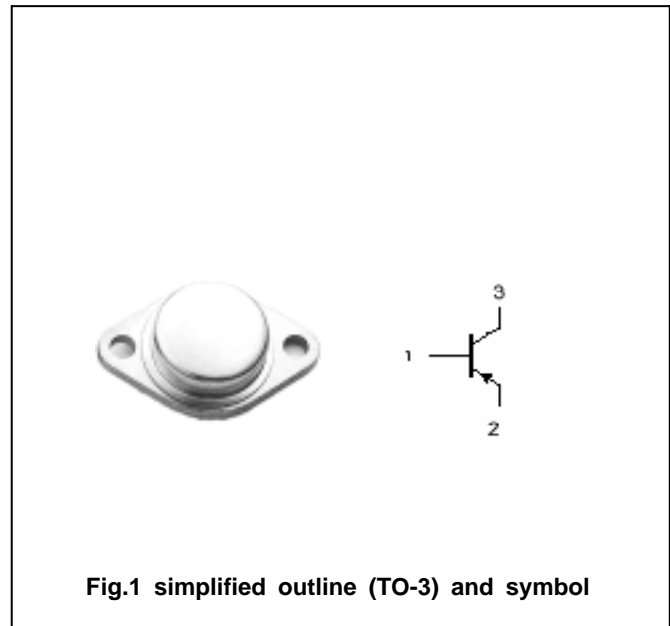


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | -200 | V |
| V_{CEO} | Collector-emitter voltage | Open base | -200 | V |
| V_{EBO} | Emitter-base voltage | Open collector | -6 | V |
| I_C | Collector current | | -15 | A |
| I_B | Base current | | -5 | A |
| P_C | Collector power dissipation | $T_C=25$ | 150 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -65~150 | |

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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 | -200 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =-10A; I _B =-1A | | | -3.0 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-200V; I _E =0 | | | -0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-6V; I _C =0 | | | -0.1 | mA |
| h _{FE} | DC current gain | I _C =-5A ; V _{CE} =-4V | 30 | | | |
| f _T | Transition frequency | I _C =-0.5A ; V _{CE} =-12V | | 20 | | MHz |

Switching times resistive load

| | | | | | | |
|----------------|--------------|--|--|-----|--|----|
| t _r | Rise time | I _C =-5.0A I _{B1} =-I _{B2} =-0.5A R _L =12 ; V _{CC} =-60V | | 0.3 | | μs |
| t _s | Storage time | | | 0.9 | | μs |
| t _f | Fall time | | | 0.2 | | μs |

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PACKAGE OUTLINE

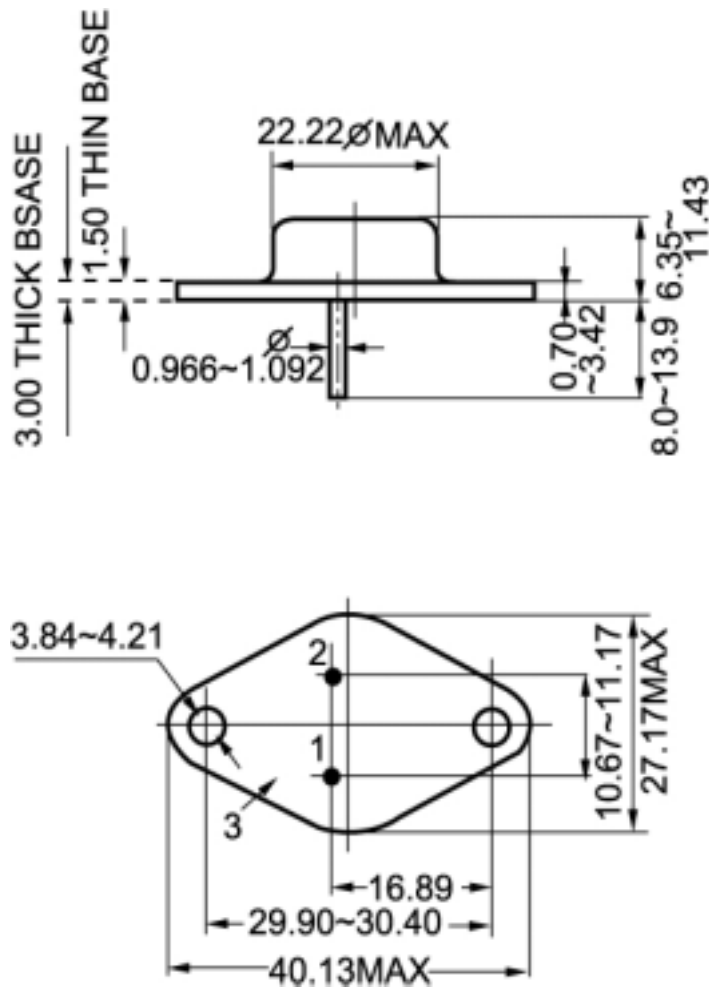


Fig.2 outline dimensions (unindicated tolerance: ± 0.1mm)