

Silicon PNP Power Transistors

2SA1074

DESCRIPTION

- With TO-3 package
- Excellent safe operating area

APPLICATIONS

- For high power audio ,stepping motor and other linear applications
- Relay or solenoid drivers
- DC-DC converters inverters

PINNING(see Fig.2)

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

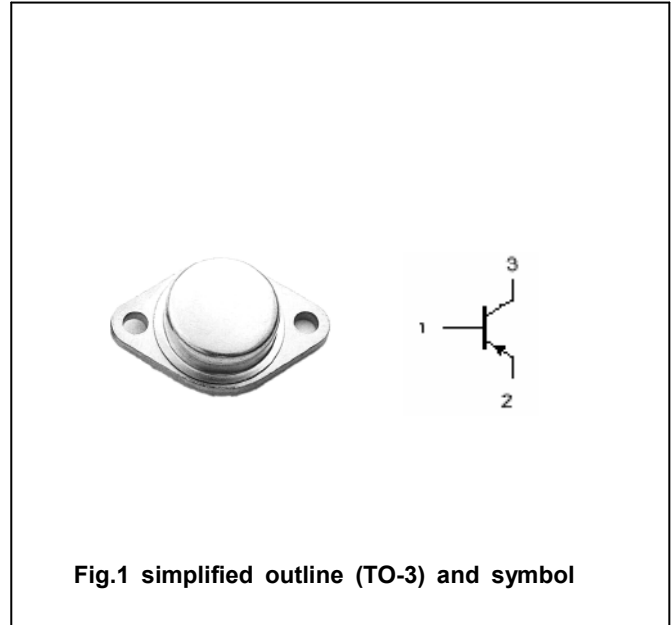


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings($T_a = \square$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|--------------------|---------|-----------|
| V_{CBO} | Collector-base voltage | Open emitter | -160 | V |
| V_{CEO} | Collector-emitter voltage | Open base | -160 | V |
| V_{EBO} | Emitter-base voltage | Open collector | -7 | V |
| I_C | Collector current | | -15 | A |
| I_B | Base current | | -7 | A |
| P_C | Collector power dissipation | $T_C = 25 \square$ | 150 | W |
| T_j | Junction temperature | | 150 | \square |
| T_{stg} | Storage temperature | | -65~200 | \square |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|-------------------------------------|------|-------------|
| $R_{th\ j-c}$ | Thermal resistance junction to case | 0.98 | \square/W |

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|---|------|------|--------------|------|
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | I _C =-0.2A ; I _B =0 | -160 | | | V |
| V _{CEsat-1} | Collector-emitter saturation voltage | I _C =-4A ; I _B =-0.4A | | | -1.1 | V |
| V _{CEsat-2} | Collector-emitter saturation voltage | I _C =-10A ; I _B =-3.3A | | | -3.0 | V |
| V _{BE} | Base-emitter on voltage | I _C =-4A ; V _{CE} =-4V | | | -1.8 | V |
| I _{CEO} | Collector cut-off current | V _{CE} =-60V ; V _{BE(off)} =0 | | | -0.1 | mA |
| I _{CEV} | Collector cut-off current | V _{CE} =Rated Value ; V _{BE(off)} =1.5V T _C =150 °C | | | -1.0 -6.0 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-7V ; I _C =0 | | | -0.1 | mA |
| h _{FE-1} | DC current gain | I _C =-4A ; V _{CE} =-4V | 20 | | | |
| h _{FE-2} | DC current gain | I _C =-10A ; V _{CE} =-4V | 5 | | | |

PACKAGE OUTLINE

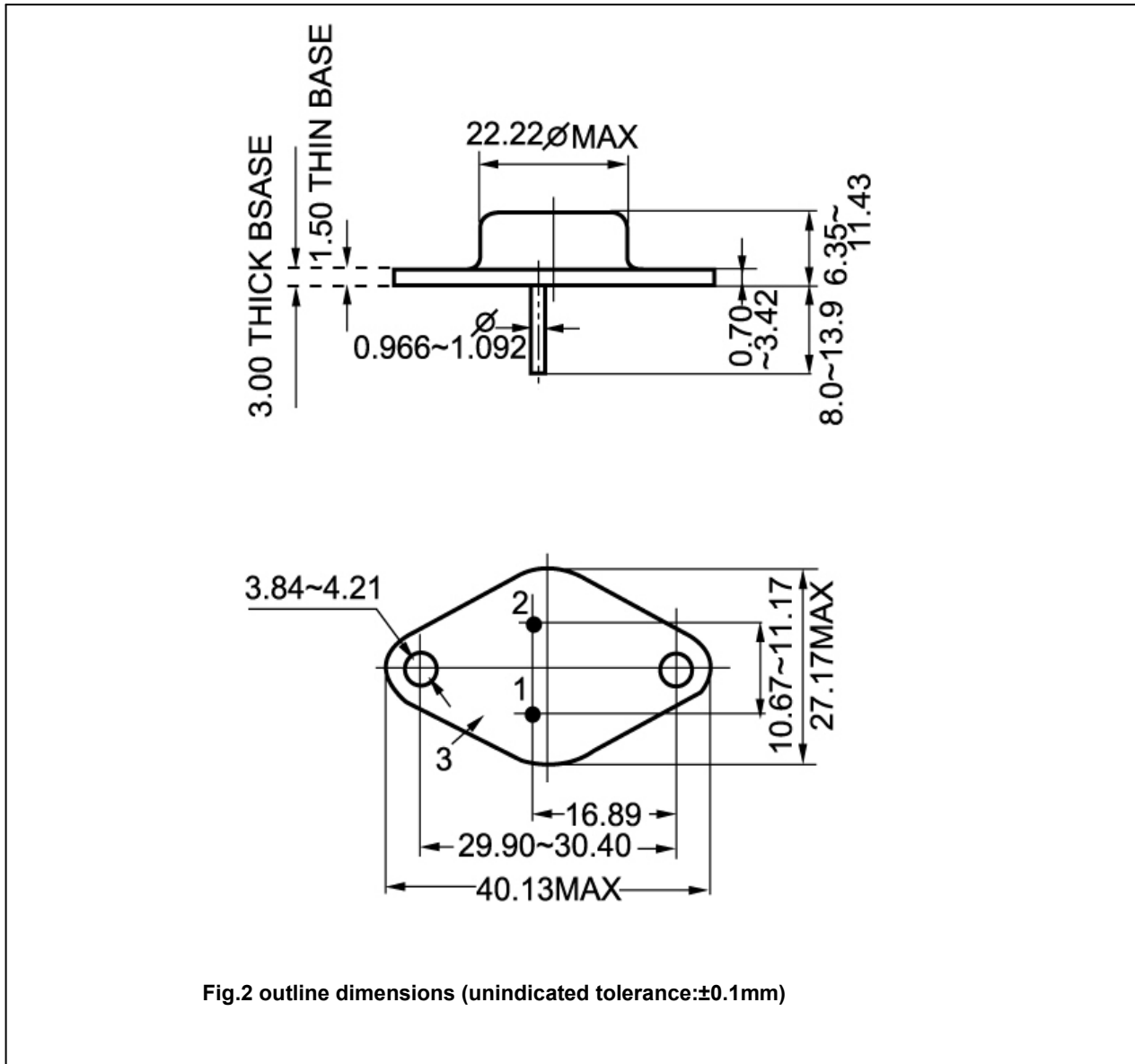


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)