

Silicon PNP Power Transistors

2SB645

DESCRIPTION

- With TO-3 package
- High power dissipation

APPLICATIONS

- For power switching and general purpose applications

PINNING(see Fig.2)

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

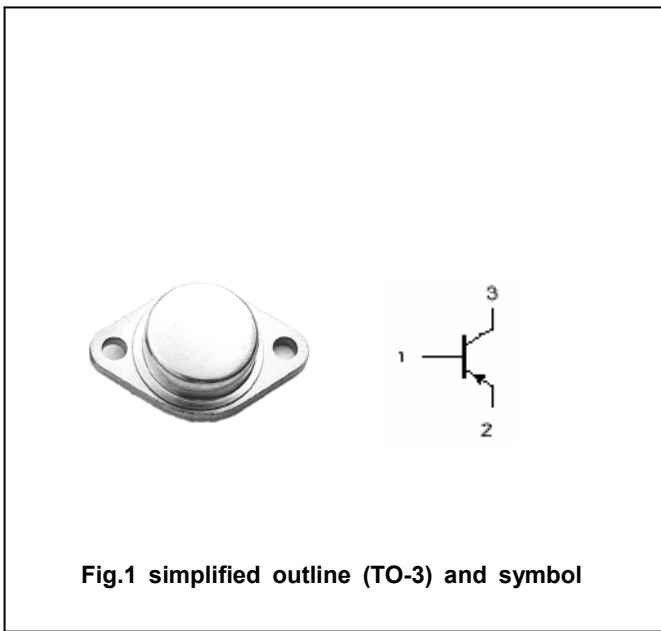


Fig.1 simplified outline (TO-3) and symbol

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 | -5 | 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°C 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 _{(BR)EBO} | Emitter-base breakdown voltage | I _E =-1mA ; I _C =0 | -5 | | | 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 =-1A ; V _{CE} =-5V | 40 | | 140 | |
| f _T | Transition frequency | I _C =-0.5A ; V _{CE} =-10V | | 12 | | MHz |

◆ h_{FE} Classifications

| R | O |
|-------|--------|
| 40-80 | 70-140 |

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PACKAGE OUTLINE

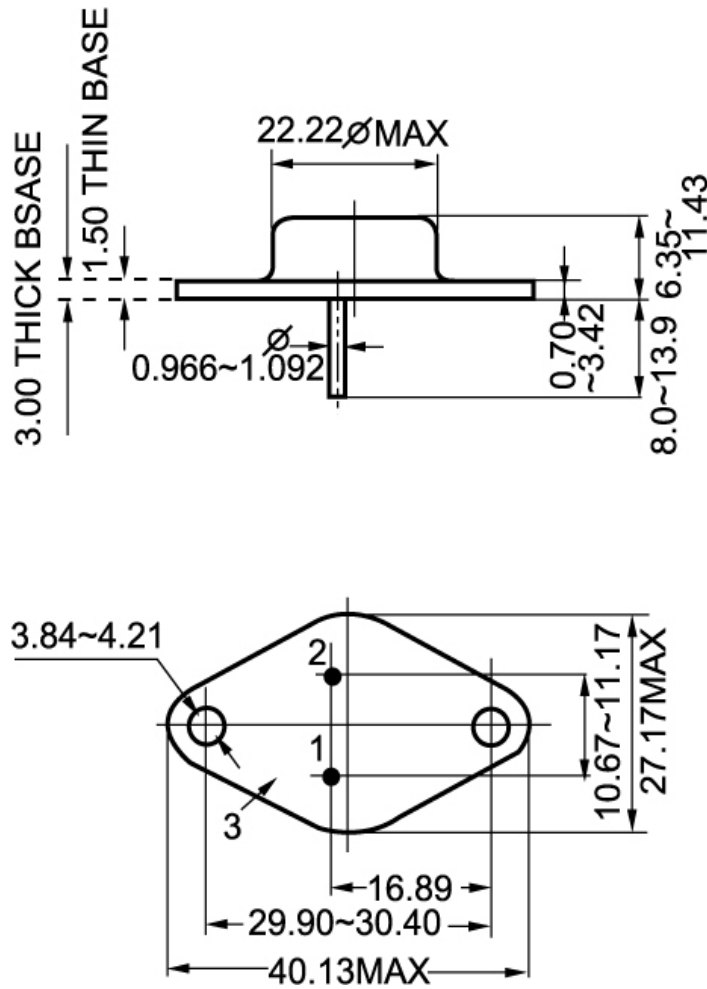


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)