

Silicon NPN Power Transistors

2SC643A

DESCRIPTION

- With TO-3 package
- High voltage,high reliability
- Low collector saturation voltage

APPLICATIONS

- For color TV horizontal output applications

PINNING(see fig.2)

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

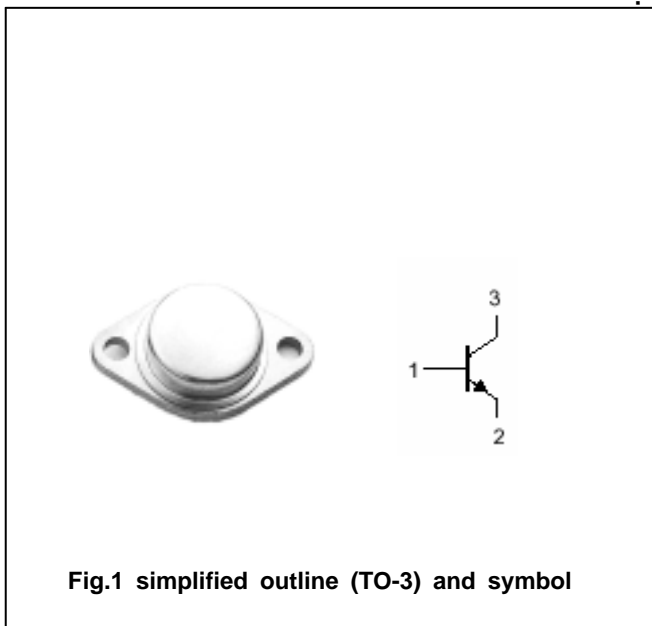


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|--------------------|---------|------|
| V _{CBO} | Collector-base voltage | Open emitter | 1500 | V |
| V _{CEO} | Collector-emitter voltage | Open base | 700 | V |
| V _{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I _C | Collector current | | 2.5 | A |
| P _C | Collector power dissipation | T _C =25 | 50 | W |
| T _j | Junction temperature | | 150 | |
| T _{stg} | Storage temperature | | -55~150 | |

Silicon NPN Power Transistors

2SC643A

CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|--|-----|------|-----|------|
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | I _C =100mA; I _B =0 | 700 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA; I _C =0 | 5 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | I _C =2A; I _B =0.6A | | | 8.0 | V |
| V _{BEsat} | Base-emitter saturation voltage | I _C =2A; I _B =0.6A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =500V; I _E =0 | | | 10 | μA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V; I _C =0 | | | 100 | μA |
| h _{FE} | DC current gain | I _C =2A; V _{CE} =15V | 5 | | | |
| f _T | Transition frequency | I _C =0.1A; V _{CE} =10V | | 2 | | MHz |

PACKAGE OUTLINE

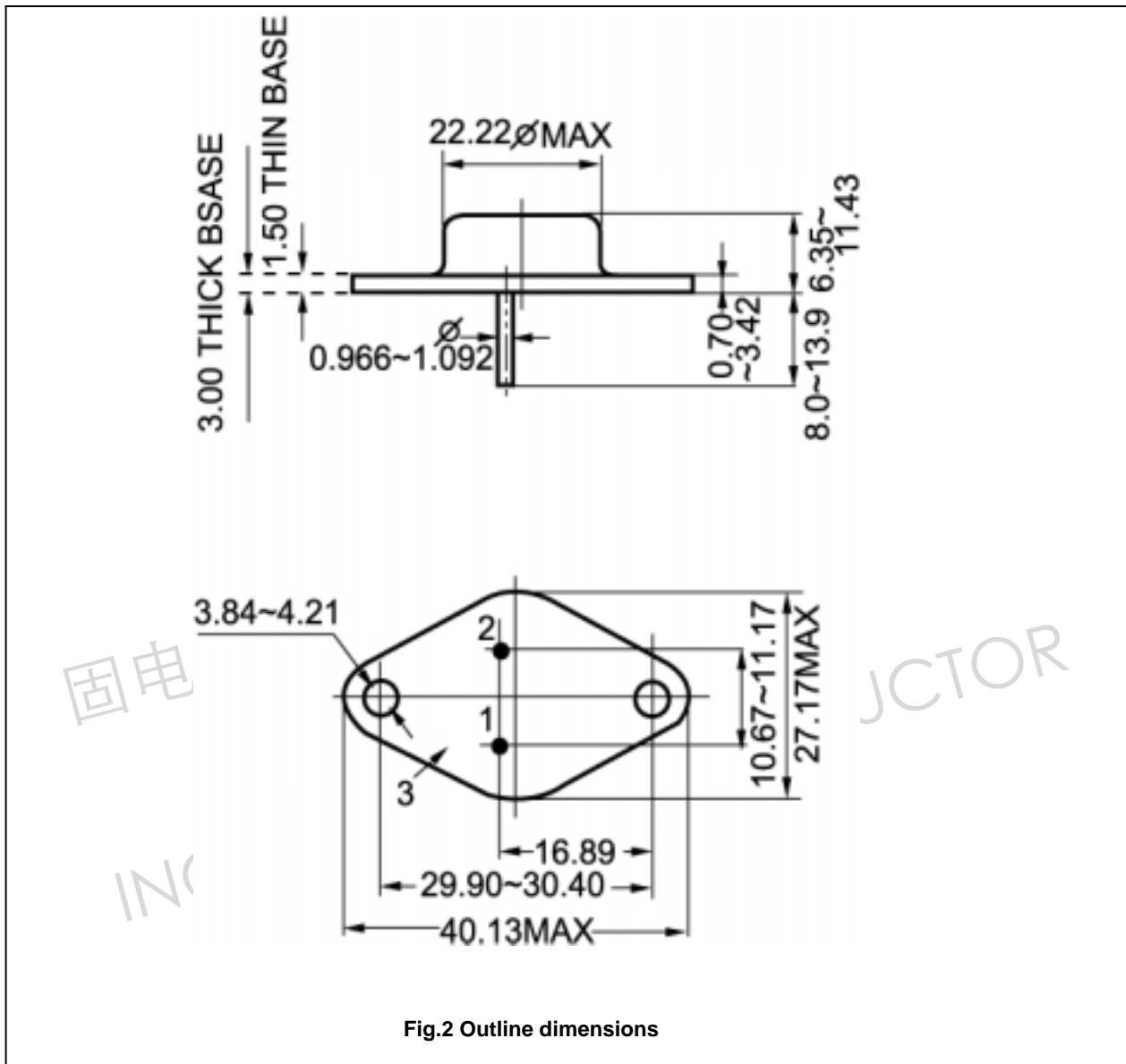


Fig.2 Outline dimensions