

Silicon NPN Power Transistors

2SC2981

DESCRIPTION

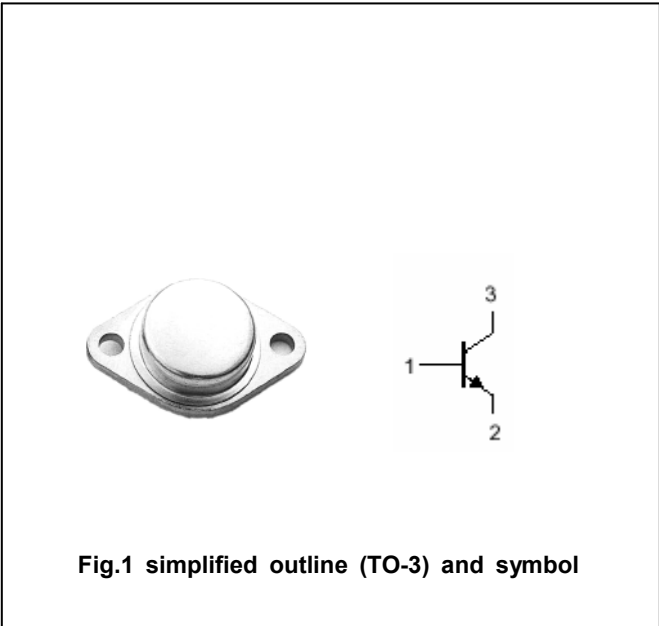
- With TO-3 package
- High voltage
- High speed

APPLICATIONS

- For high voltage ,high speed and power switching applications

PINNING(see Fig.2)

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



ABSOLUTE MAXIMUM RATINGS($T_C=25^\circ C$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|-----------------------------|------------------|---------|------------|
| V_{CBO} | Collector-base voltage | Open emitter | 900 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 800 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 7 | V |
| I_C | Collector current | | 8 | A |
| P_C | Collector power dissipation | $T_C=25^\circ C$ | 100 | W |
| T_j | Junction temperature | | 150 | $^\circ C$ |
| T_{stg} | Storage temperature | | -55~150 | $^\circ C$ |

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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 =5mA ; R _{BE} =∞ | 800 | | | V |
| V _{(BR)CBO} | Collector-base breakdown voltage | I _C =1mA ; I _E =0 | 900 | | | V |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =1mA ; I _C =0 | 7 | | | V |
| V _{CE(sat)} | Collector-emitter saturation voltage | I _C =2.5A ; I _B =0.5A | | | 1.0 | V |
| V _{BE(sat)} | Base-emitter saturation voltage | I _C =2.5A ; I _B =0.5A | | | 1.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =750V ; I _E =0 | | | 0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =5V ; I _C =0 | | | 0.1 | mA |
| h _{FE-1} | DC current gain | I _C =0.8A ; V _{CE} =5V | 15 | | | |
| h _{FE-2} | DC current gain | I _C =4A ; V _{CE} =5V | 10 | | | |

PACKAGE OUTLINE

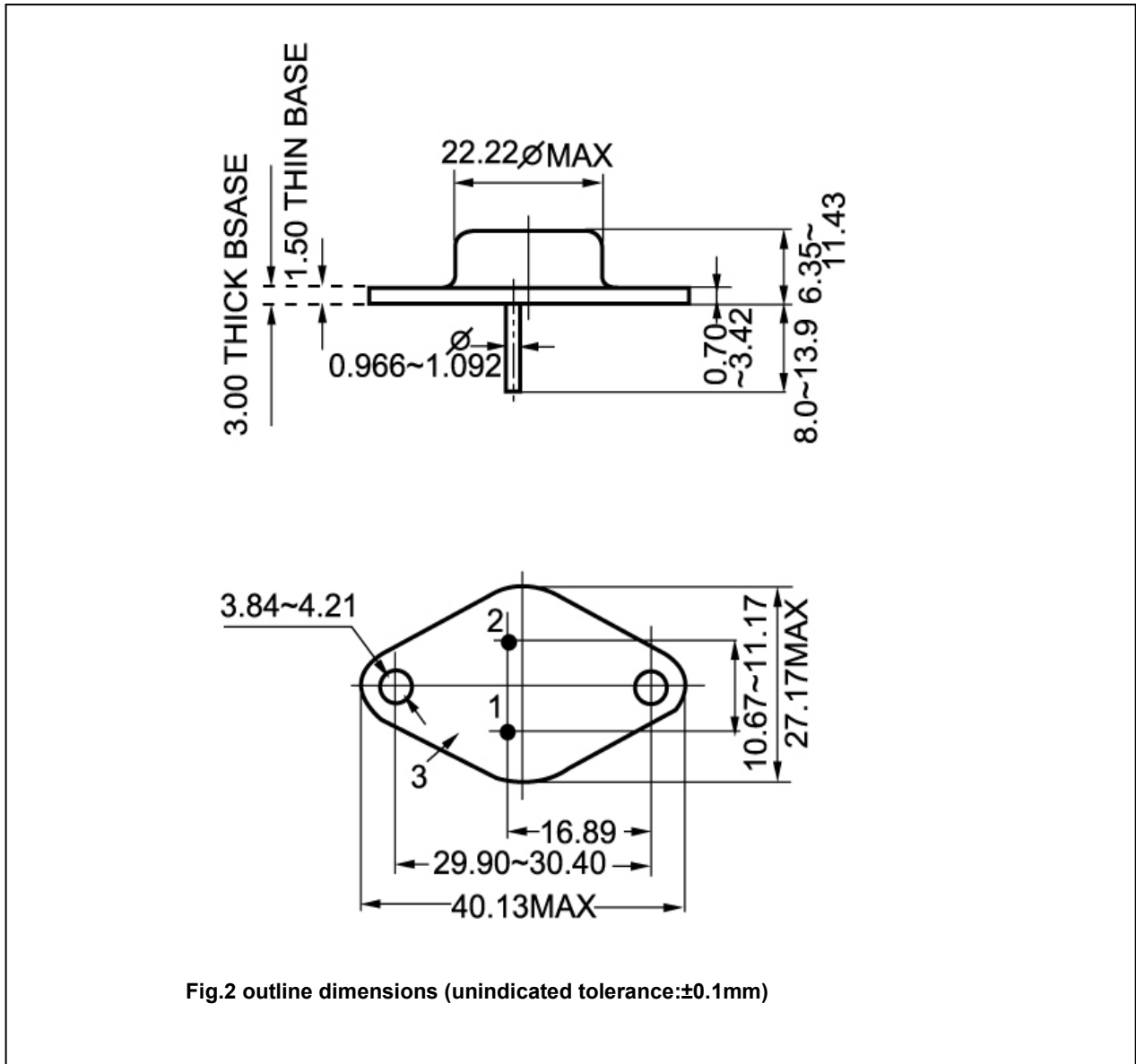


Fig.2 outline dimensions (unindicated tolerance:±0.1mm)