

Silicon NPN Power Transistors

2N6257

DESCRIPTION

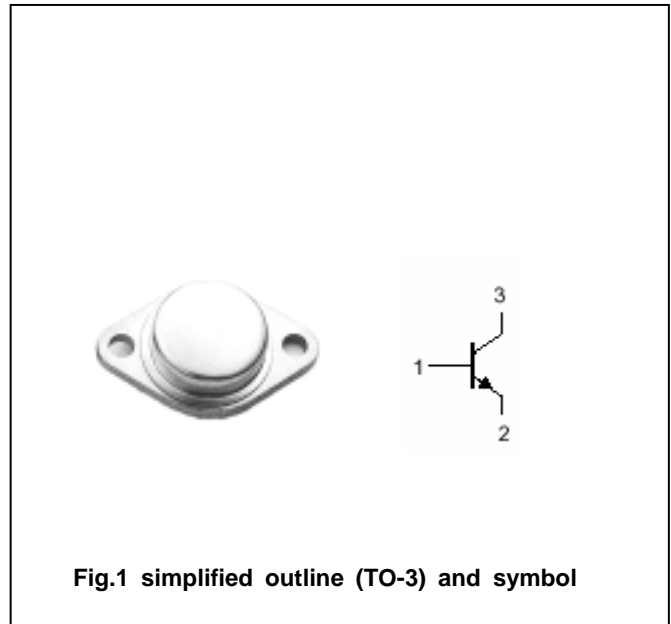
- With TO-3 package
- Low collector saturation voltage
- Excellent safe operating area

APPLICATIONS

- Designed for audio amplifier and switching circuits applications

PINNING

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

Absolute maximum ratings($T_a = \quad$)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|-----------|---------------------------|----------------|---------|------|
| V_{CBO} | Collector-base voltage | Open emitter | 50 | V |
| V_{CEO} | Collector-emitter voltage | Open base | 40 | V |
| V_{EBO} | Emitter-base voltage | Open collector | 5 | V |
| I_C | Collector current | | 20 | A |
| P_D | Total Power Dissipation | $T_C=25$ | 150 | W |
| T_j | Junction temperature | | 150 | |
| T_{stg} | Storage temperature | | -65~200 | |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | VALUE | UNIT |
|---------------|-------------------------------------|-------|------|
| $R_{th\ j-c}$ | Thermal resistance junction to case | 0.875 | /W |

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CHARACTERISTICS

T_j=25 unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------------|--------------------------------------|---|-----|------|------------|------|
| V _{CEO(SUS)} | Collector-emitter sustaining voltage | I _C =0.2A ; I _B =0 | 40 | | | V |
| V _{CEsat-1} | Collector-emitter saturation voltage | I _C =8A ; I _B =0.8A | | | 1.5 | V |
| V _{CEsat-2} | Collector-emitter saturation voltage | I _C =20A ; I _B =4A | | | 4.0 | V |
| I _{CEO} | Collector cut-off current | V _{CE} =40V; I _B =0 | | | 1.0 | mA |
| I _{CEV} | Collector cut-off current | V _{CE} =50V; V _{BE(off)} =1.5V T _C =150 | | | 0.1 5.0 | mA |
| I _{CBO} | Collector cut-off current | V _{CB} =50V; 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 =8A ; V _{CE} =4V | 15 | | 75 | |
| h _{FE-2} | DC current gain | I _C =20A ; V _{CE} =4V | 5 | | | |
| f _T | Transition frequency | I _C =1A; V _{CE} =10V | 0.8 | | | MHz |

PACKAGE OUTLINE

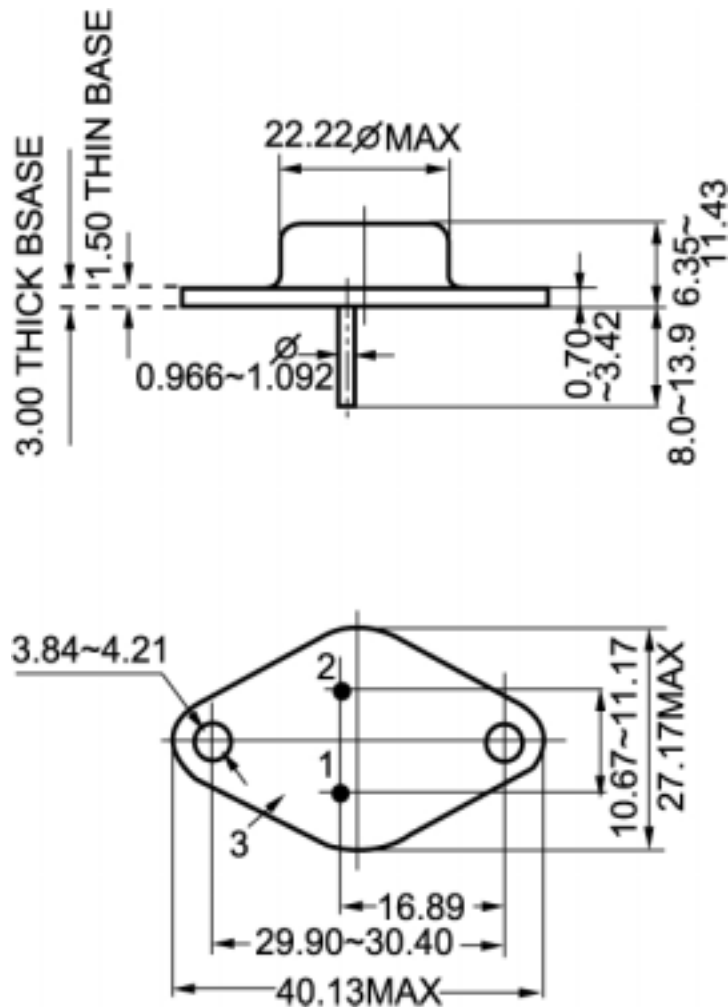


Fig.2 outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)