

Silicon NPN Power Transistors

2N6260

DESCRIPTION

- With TO-66 package
- Low saturation voltage
- Wide safe operating area

APPLICATIONS

- Power switching circuits
- High-fidelity amplifiers
- Solenoid drivers
- Series and shunt-regulator driver and output stages

PINNING (See Fig.2)

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

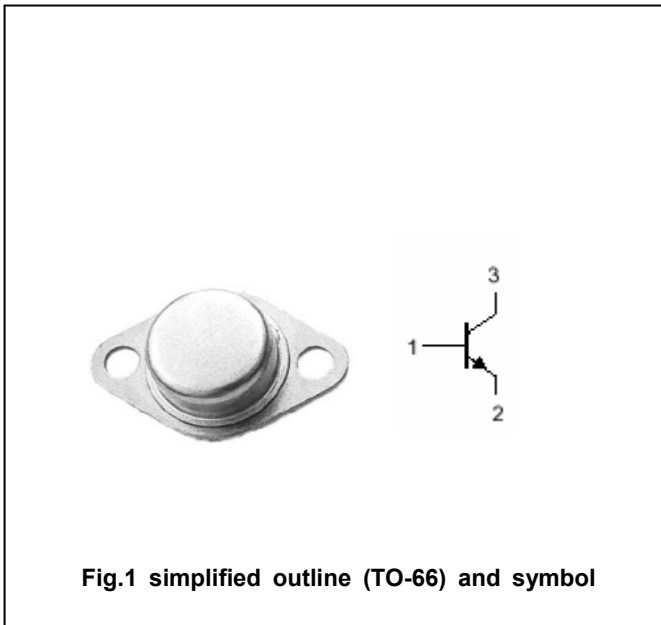


Fig.1 simplified outline (TO-66) and symbol

Absolute maximum ratings(Ta=25°C)

| SYMBOL           | PARAMETER                 | CONDITIONS           | VALUE   | UNIT |
|------------------|---------------------------|----------------------|---------|------|
| V <sub>CBO</sub> | Collector-base voltage    | Open emitter         | 50      | V    |
| V <sub>CEO</sub> | Collector-emitter voltage | Open base            | 40      | V    |
| V <sub>EBO</sub> | Emitter-base voltage      | Open collector       | 7       | V    |
| I <sub>C</sub>   | Collector current         |                      | 4       | A    |
| I <sub>B</sub>   | Base current              |                      | 2       | A    |
| P <sub>T</sub>   | Total power dissipation   | T <sub>C</sub> =25°C | 29      | W    |
| T <sub>j</sub>   | Junction temperature      |                      | 150     | °C   |
| T <sub>stg</sub> | Storage temperature       |                      | -65~200 | °C   |

THERMAL CHARACTERISTICS

| SYMBOL              | PARAMETER                           | MAX | UNIT |
|---------------------|-------------------------------------|-----|------|
| R <sub>th j-c</sub> | Thermal resistance junction to case | 3.5 | °C/W |

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## CHARACTERISTICS

T<sub>j</sub>=25 °C unless otherwise specified

| SYMBOL                | PARAMETER                            | CONDITIONS  | MIN | TYP. | MAX        | UNIT |
|-----------------------|--------------------------------------|---|-----|------|------------|------|
| V <sub>CEO(SUS)</sub> | Collector-emitter sustaining voltage | I <sub>C</sub> =0.1 A ; I <sub>B</sub> =0                                   | 80  |      |            | V    |
| V <sub>CEsat</sub>    | Collector-emitter saturation voltage | I <sub>C</sub> =1.5A; I <sub>B</sub> =0.15A                                 |     |      | 1.5        | V    |
| V <sub>BE</sub>       | Base -emitter on voltage             | I <sub>C</sub> =1.5A ; V <sub>CE</sub> =2V                                  |     |      | 1.5        | V    |
| I <sub>CEV</sub>      | Collector cut-off current            | V <sub>CE</sub> =40V; V <sub>BE(off)</sub> =-1.5V<br>T <sub>C</sub> =150 °C |     |      | 0.5<br>1.0 | mA   |
| I <sub>CEO</sub>      | Collector cut-off current            | V <sub>CE</sub> =30V; I <sub>B</sub> =0                                     |     |      | 0.5        | mA   |
| I <sub>EBO</sub>      | Emitter cut-off current              | V <sub>EB</sub> =7V; I <sub>C</sub> =0                                      |     |      | 0.2        | mA   |
| h <sub>FE-1</sub>     | DC current gain                      | I <sub>C</sub> =4A ; V <sub>CE</sub> =2V                                    | 5   |      |            |      |
| h <sub>FE-2</sub>     | DC current gain                      | I <sub>C</sub> =1.5A ; V <sub>CE</sub> =2V                                  | 20  |      | 100        |      |

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PACKAGE OUTLINE

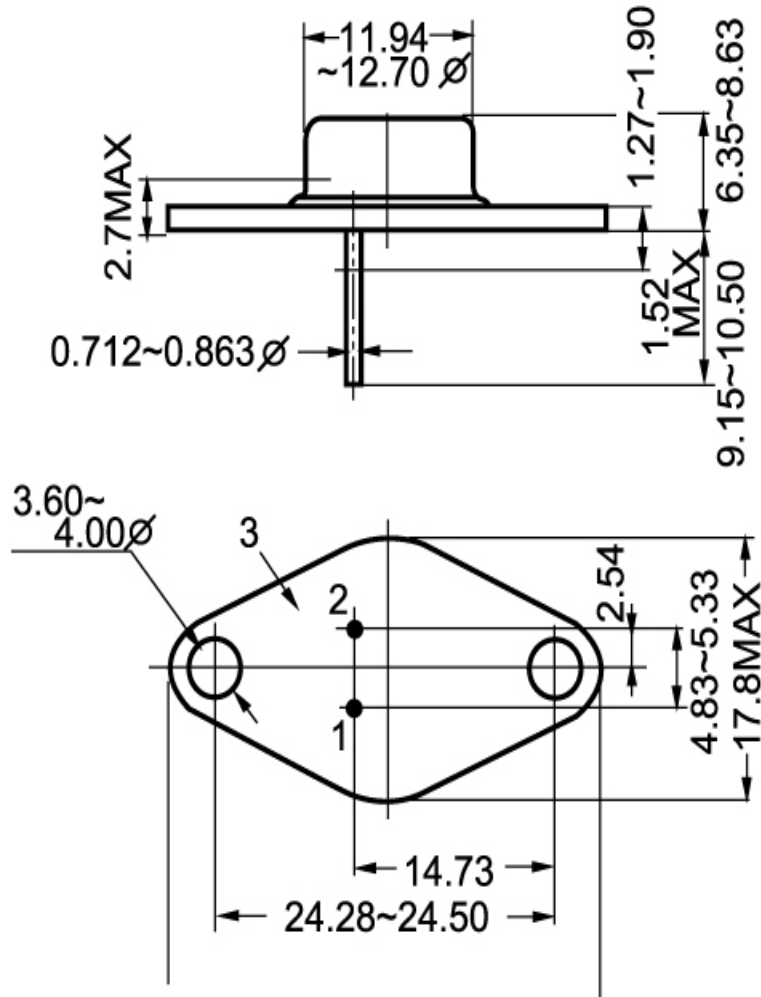


Fig.2 Outline dimensions