

Silicon PNP Power Transistors

2SA1643

DESCRIPTION

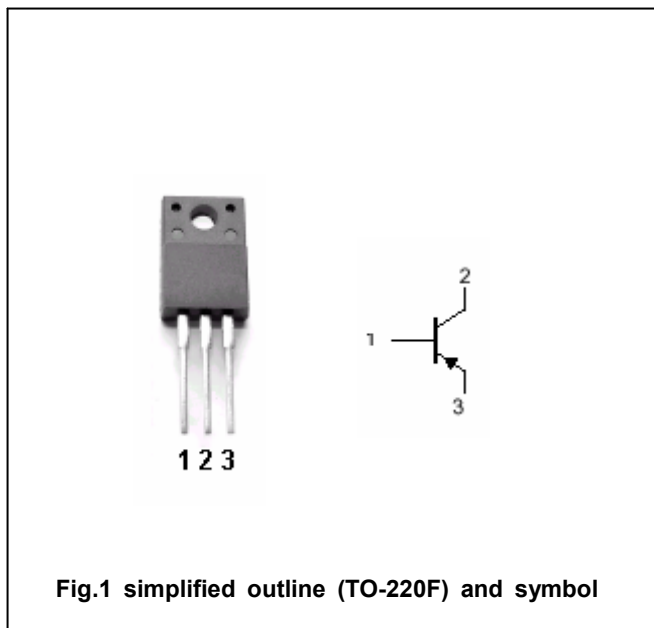
- With TO-220F package
- Complement to type 2SC4327
- Low collector saturation voltage

APPLICATIONS

- For power switching applications

PINNING

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



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            | -35     | V    |
| V <sub>EBO</sub> | Emitter-base voltage      | Open collector       | -7      | V    |
| I <sub>C</sub>   | Collector current         |                      | -7      | A    |
| P <sub>C</sub>   | Collector dissipation     | T <sub>C</sub> =25°C | 25      | W    |
| T <sub>j</sub>   | Junction temperature      |                      | 150     | °C   |
| T <sub>stg</sub> | Storage temperature       |                      | -55~150 | °C   |

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## CHARACTERISTICS

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

| SYMBOL               | PARAMETER                            | CONDITIONS                                  | MIN | TYP. | MAX  | UNIT |
|----------------------|--------------------------------------|---|-----|------|------|------|
| V <sub>(BR)CEO</sub> | Collector-emitter breakdown voltage  | I <sub>C</sub> =-25mA ; I <sub>B</sub> =0   | -80 |      |      | V    |
| V <sub>(BR)EBO</sub> | Emitter-base breakdown voltage       | I <sub>E</sub> =-1mA ; I <sub>C</sub> =0    | -7  |      |      | V    |
| V <sub>CEsat</sub>   | Collector-emitter saturation voltage | I <sub>C</sub> =-5A ; I <sub>B</sub> =-0.3A |     |      | -0.5 | V    |
| I <sub>CBO</sub>     | Collector cut-off current            | V <sub>CB</sub> =-50V ; I <sub>E</sub> =0   |     |      | -10  | μA   |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =-7V ; I <sub>C</sub> =0    |     |      | -10  | μA   |
| h <sub>FE</sub>      | DC current gain                      | I <sub>C</sub> =-5A ; V <sub>CE</sub> =-2V  | 50  |      |      |      |
| f <sub>T</sub>       | Transition frequency                 | I <sub>E</sub> =1A ; V <sub>CE</sub> =-12V  |     | 75   |      | MHz  |

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PACKAGE OUTLINE

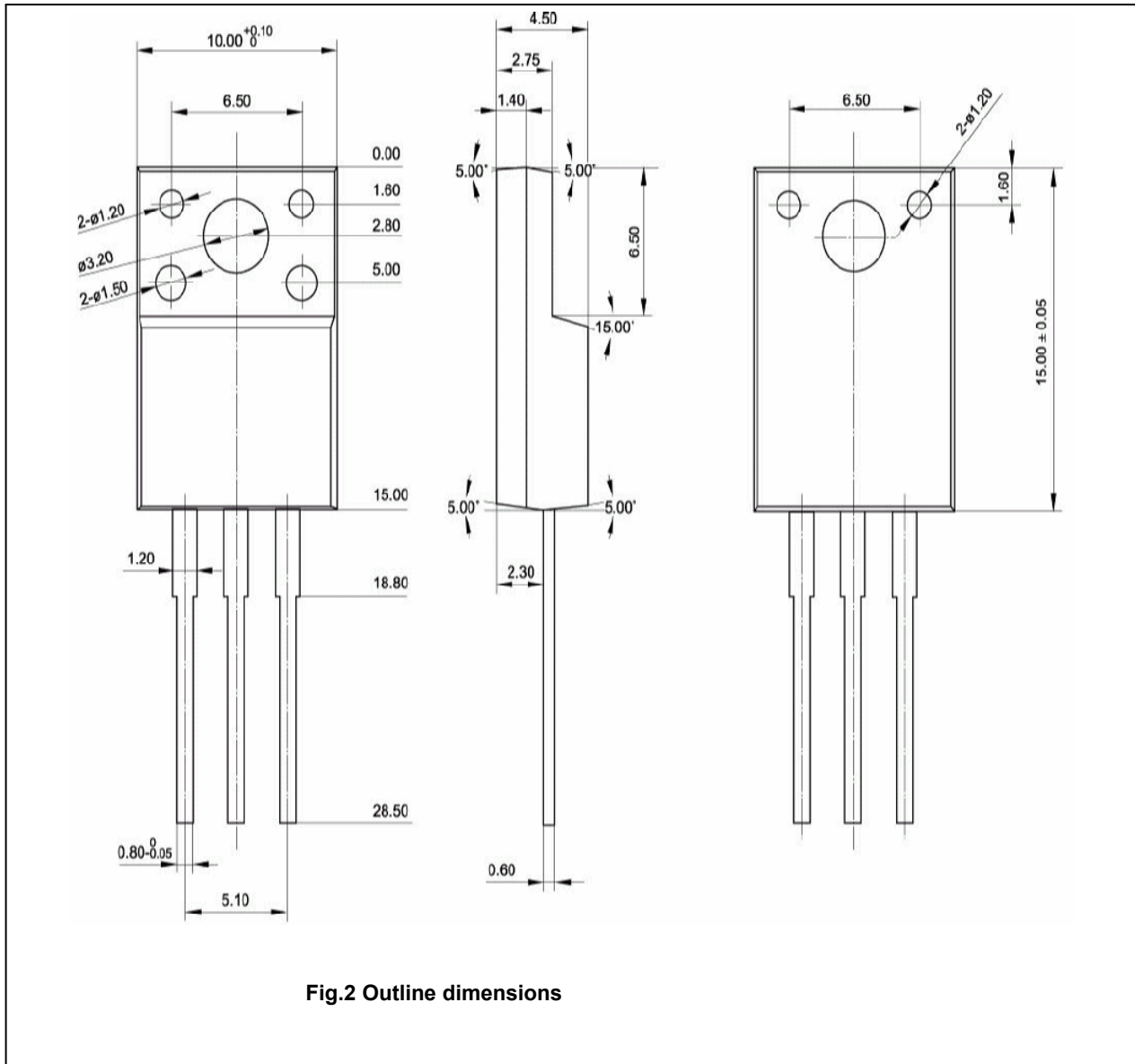


Fig.2 Outline dimensions