

## Silicon PNP Power Transistors

2SB849

## DESCRIPTION

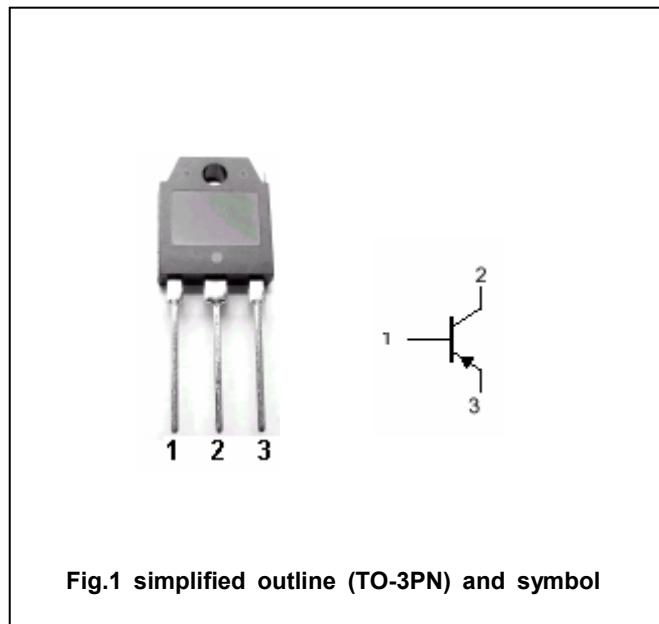
- With TO-3PN package
- Complement to type 2SD1110
- Wide area of safe operation

## APPLICATIONS

- For use in low frequency power amplifier applications

## PINNING

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

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

| SYMBOL    | PARAMETER                   | CONDITIONS             | VALUE   | UNIT             |
|-----------|-----------------------------|------------------------|---------|------------------|
| $V_{CBO}$ | Collector-base voltage      | Open emitter           | -120    | V                |
| $V_{CEO}$ | Collector-emitter voltage   | Open base              | -120    | V                |
| $V_{EBO}$ | Emitter-base voltage        | Open collector         | -7      | V                |
| $I_C$     | Collector current           |                        | -7      | A                |
| $P_C$     | Collector power dissipation | $T_C=25^\circ\text{C}$ | 80      | W                |
| $T_j$     | Junction temperature        |                        | 150     | $^\circ\text{C}$ |
| $T_{stg}$ | Storage temperature         |                        | -55~150 | $^\circ\text{C}$ |

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## CHARACTERISTICS

Tj=25°C unless otherwise specified

| SYMBOL        | PARAMETER                            | CONDITIONS                     | MIN  | TYP. | MAX  | UNIT    |
|---------------|--------------------------------------|--------------------------------|------|------|------|---------|
| $V_{CEO(BR)}$ | Collector-emitter breakdown voltage  | $I_C=-10mA ; I_B=0$            | -120 |      |      | V       |
| $V_{CE(sat)}$ | Collector-emitter saturation voltage | $I_C=-5A ; I_B=-0.5A$          |      |      | -2.0 | V       |
| $V_{BE(sat)}$ | Base-emitter saturation voltage      | $I_C=-5A ; I_B=-0.5A$          |      |      | -2.0 | V       |
| $I_{CBO}$     | Collector cut-off current            | $V_{CB}=-120V ; I_E=0$         |      |      | -50  | $\mu A$ |
| $I_{EBO}$     | Emitter cut-off current              | $V_{EB}=-6V ; I_C=0$           |      |      | -50  | $\mu A$ |
| $h_{FE-1}$    | DC current gain                      | $I_C=-20mA ; V_{CE}=-5V$       | 20   |      |      |         |
| $h_{FE-2}$    | DC current gain                      | $I_C=-1A ; V_{CE}=-5V$         | 40   |      | 200  |         |
| $C_{OB}$      | Output capacitance                   | $I_E=0 ; V_{CB}=-10V ; f=1MHz$ |      | 340  |      | pF      |
| $f_T$         | Transition frequency                 | $I_C=-0.2A ; V_{CE}=-5V$       |      | 14   |      | MHz     |

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[illegible]