

Silicon PNP Power Transistors

2SA1788

DESCRIPTION

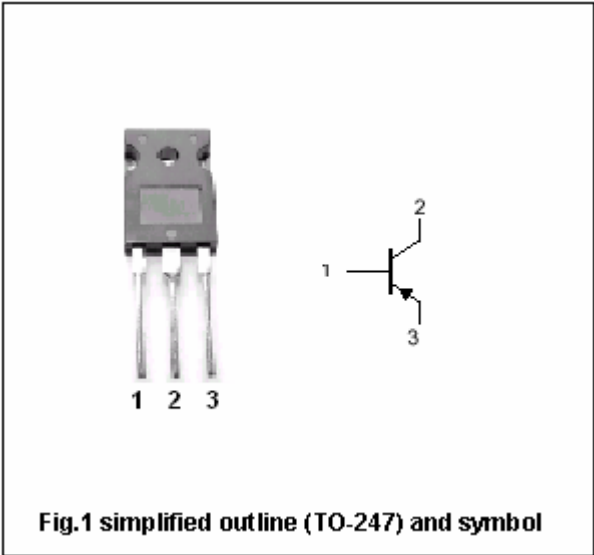
- With TO-247 package
- Complement to type 2SC4652

APPLICATIONS

- For audio output applications

PINNING

| PIN | DESCRIPTION                          |
|-----|--------------------------------------|
| 1   | Base                                 |
| 2   | Collector;connected to mounting base |
| 3   | Emitter                              |



Absolute maximum ratings(Tc=25 )

| SYMBOL           | PARAMETER                   | CONDITIONS         | VALUE   | UNIT |
|------------------|-----------------------------|--------------------|---------|------|
| V <sub>CBO</sub> | Collector-base voltage      | Open emitter       | -120    | V    |
| V <sub>CEO</sub> | Collector-emitter voltage   | Open base          | -120    | V    |
| V <sub>EBO</sub> | Emitter-base voltage        | Open collector     | -5      | V    |
| I <sub>C</sub>   | Collector current           |                    | -8      | A    |
| P <sub>C</sub>   | Collector power dissipation | T <sub>C</sub> =25 | 80      | W    |
| T <sub>j</sub>   | Junction temperature        |                    | 150     |      |
| T <sub>stg</sub> | Storage temperature         |                    | -55~150 |      |

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## CHARACTERISTICS

T<sub>j</sub>=25 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    | -120 |      |      | V    |
| V <sub>(BR)CBO</sub> | Collector-base breakdown voltage     | I <sub>C</sub> =-1mA; I <sub>E</sub> =0     | -120 |      |      | V    |
| V <sub>(BR)EBO</sub> | Emitter-base breakdown voltage       | I <sub>E</sub> =-1mA; I <sub>C</sub> =0     | -5   |      |      | V    |
| V <sub>CEsat</sub>   | Collector-emitter saturation voltage | I <sub>C</sub> =-6A; I <sub>B</sub> =-0.6 A |      |      | -2.0 | V    |
| V <sub>BEsat</sub>   | Base-emitter saturation voltage      | I <sub>C</sub> =-6A; I <sub>B</sub> =-0.6 A |      |      | -2.5 | V    |
| I <sub>CBO</sub>     | Collector cut-off current            | V <sub>CB</sub> =-120V; I <sub>E</sub> =0   |      |      | -10  | μ A  |
| I <sub>EBO</sub>     | Emitter cut-off current              | V <sub>EB</sub> =-5V; I <sub>C</sub> =0     |      |      | -10  | μ A  |
| h <sub>FE</sub>      | DC current gain                      | I <sub>C</sub> =-1A ; V <sub>CE</sub> =-5V  | 60   |      | 320  |      |

◆ h<sub>FE</sub> classifications

| D      | E       | F       |
|--------|---------|---------|
| 60-120 | 100-200 | 160-320 |

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