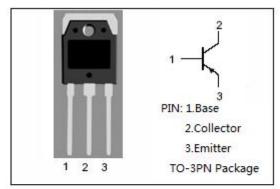


# **isc Silicon PNP Power Transistor**

# 2SA2223

### **DESCRIPTION**

- High frequency multi emitter transistor
- Small package(TO-3P)
- · High power handling capacity ,160W
- Complement to Type 2SC6145
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

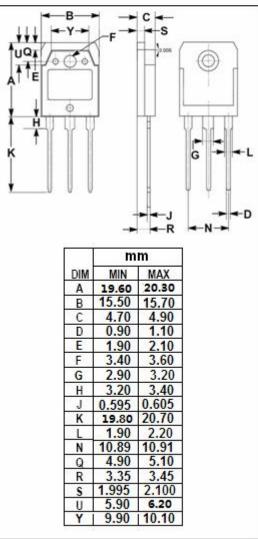


### **APPLICATIONS**

- Signal transistors for audio amplifiers
- Audio market

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL           | PARAMETER   | VALUE   | UNIT         |
|------------------|---|---------|--------------|
| $V_{CBO}$        | Collector-Base Voltage                            | -230    | V            |
| $V_{\text{CEO}}$ | Collector-Emitter Voltage                         | -230    | V            |
| V <sub>EBO</sub> | Emitter-Base Voltage                              | -5      | V            |
| Ic               | Collector Current-Continuous                      | -15     | А            |
| l <sub>Β</sub>   | Base Current-Continuous                           | -4.0    | А            |
| Pc               | Collector Power Dissipation @ T <sub>C</sub> =25℃ | 160     | W            |
| TJ               | Junction Temperature                              | 150     | $^{\circ}$ C |
| T <sub>stg</sub> | Storage Temperature Range                         | -55~150 | $^{\circ}$ C |





## **isc Silicon PNP Power Transistor**

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#### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

| SYMBOL                | PARAMETER                            | CONDITIONS   | MIN  | TYP. | MAX  | UNIT       |
|-----------------------|--------------------------------------|--|------|------|------|------------|
| V <sub>(BR)</sub> CEO | Collector-Emitter Breakdown Voltage  | I <sub>C</sub> = -25mA; I <sub>B</sub> = 0           | -230 |      |      | V          |
| V <sub>CE(sat)</sub>  | Collector-Emitter Saturation Voltage | I <sub>C</sub> = -5A; I <sub>B</sub> = -0.5A         |      |      | -0.5 | V          |
| I <sub>CBO</sub>      | Collector Cutoff Current             | V <sub>CB</sub> = -230V; I <sub>E</sub> = 0          |      |      | -10  | μ <b>A</b> |
| I <sub>EBO</sub>      | Emitter Cutoff Current               | V <sub>EB</sub> = -5V; I <sub>C</sub> = 0            |      |      | -10  | μ <b>A</b> |
| h <sub>FE</sub>       | DC Current Gain                      | Ic= -5A; V <sub>CE</sub> = -4V                       | 40   |      | 140  |            |
| Сов                   | Output Capacitance                   | I <sub>E</sub> =0; V <sub>CB</sub> = -10V; f= 1.0MHz |      | 500  |      | pF         |
| f⊤                    | Current-Gain—Bandwidth Product       | Ic=-2A; VcE= -12V                                    |      | 35   |      | MHz        |

### h<sub>FE</sub> Classifications

| R     | 0      | Y      |
|-------|--------|--------|
| 40-80 | 50-100 | 70-140 |

#### Notice:

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2