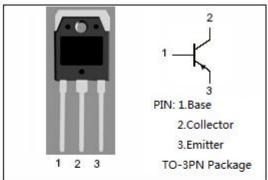


## **isc Silicon PNP Power Transistor**

2SB692

### **DESCRIPTION**

- · Collector-Emitter Breakdown Voltage-
  - : V<sub>(BR)CEO</sub>= -100V(Min)
- Good Linearity of h<sub>FE</sub>
- · Wide Area of Safe Operation
- Complement to Type 2SD728
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

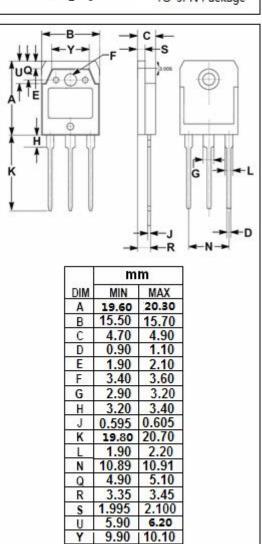


## **APPLICATIONS**

 Designed for low frequency power amplifier and power switching applications.

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL           | PARAMETER   | VALUE   | UNIT         |
|------------------|---|---------|--------------|
| V <sub>CBO</sub> | Collector-Base Voltage                            | -150    | V            |
| V <sub>CEO</sub> | Collector-Emitter Voltage                         | -100    | V            |
| V <sub>EBO</sub> | Emitter-Base Voltage                              | -5      | V            |
| Ic               | Collector Current-Continuous                      | -6      | А            |
| Pc               | Collector Power Dissipation @ T <sub>C</sub> =25℃ | 70      | W            |
| TJ               | Junction Temperature                              | 150     | $^{\circ}$ C |
| T <sub>stg</sub> | Storage Temperature Range                         | -55~150 | $^{\circ}$   |





## isc Silicon PNP Power Transistor

2SB692

#### **ELECTRICAL CHARACTERISTICS**

T<sub>C</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> = -30mA; I <sub>B</sub> = 0                            | -100 |      |      | V    |
| V <sub>(BR)CBO</sub> | Collector-Base Breakdown Voltage     | I <sub>C</sub> = -1mA; I <sub>E</sub> = 0                             | -150 |      |      | V    |
| V <sub>(BR)EBO</sub> | Emitter-Base Breakdown Voltage       | I <sub>E</sub> = -1mA; I <sub>C</sub> = 0                             | -5   |      |      | V    |
| V <sub>CE(sat)</sub> | Collector-Emitter Saturation Voltage | I <sub>C</sub> = -4A; I <sub>B</sub> = -0.4A                          |      |      | -1.5 | V    |
| V <sub>BE(on)</sub>  | Base -Emitter On Voltage             | I <sub>C</sub> = -1A; V <sub>CE</sub> = -5V                           |      |      | -1.5 | V    |
| Ісво                 | Collector Cutoff Current             | V <sub>CB</sub> = -150V; I <sub>E</sub> =0                            |      |      | -100 | μА   |
| I <sub>EBO</sub>     | Emitter Cutoff Current               | V <sub>EB</sub> = -5V; I <sub>C</sub> =0                              |      |      | -100 | μА   |
| h <sub>FE-1</sub>    | DC Current Gain                      | Ic= -1A; Vc== -5V   | 40   |      | 200  |      |
| h <sub>FE-2</sub>    | DC Current Gain                      | I <sub>C</sub> = -4A; V <sub>CE</sub> = -5V                           | 20   |      |      |      |
| Сов                  | Output Capacitance                   | I <sub>E</sub> =0; V <sub>CB</sub> = -10V; f <sub>test</sub> = 1.0MHz |      | 300  |      | pF   |
| f⊤                   | Current-Gain—Bandwidth Product       | Ic=-1A; VcE= -5V  |      | 7    |      | MHz  |

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