

# isc Silicon PNP Power Transistor

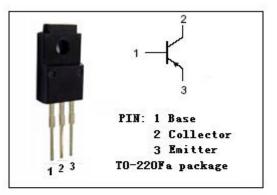
# 2SB1187

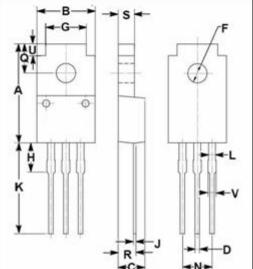
### DESCRIPTION

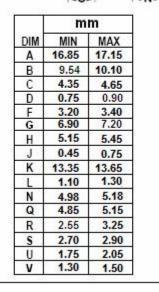
- Collector-Emitter Breakdown Voltage-
- : V<sub>(BR)CEO</sub>= -60V(Min.)
- Wide Area of Safe Operation
- Complement to Type 2SD1761
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

• Designed for low frequency power amplifier applications.







## ABSOLUTE MAXIMUM RATINGS(Ta=25 °C)

| SYMBOL           | PARAMETER                                       | VALUE | UNIT |  |
|------------------|---|-------|------|--|
| V <sub>CBO</sub> | Collector-Base Voltage                          | -60   | V    |  |
| V <sub>CEO</sub> | Collector-Emitter Voltage                       | -60   | V    |  |
| V <sub>EBO</sub> | Emitter-Base Voltage                            | -5    | V    |  |
| lc               | Collector Current-Continuous                    | -3    | А    |  |
| I <sub>CM</sub>  | Collector Current-Peak                          | -6    | A    |  |
| Pc               | Collector Power Dissipation @ $T_a=25^{\circ}C$ | 2     | w    |  |
|                  | Collector Power Dissipation @ $T_c=25^{\circ}C$ | 30    |      |  |
| TJ               | Junction Temperature                            | 150   | °C   |  |
| T <sub>stg</sub> | Storage Temperature Range -55~150               |       | °C   |  |

isc website: <u>www.iscsemi.com</u>



## **isc Silicon PNP Power Transistor**

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## **ELECTRICAL CHARACTERISTICS**

#### T<sub>c</sub>=25℃ unless otherwise specified

| SYMBOL               | PARAMETER                            | CONDITIONS                                   | MIN | TYP. | МАХ  | UNIT |
|----------------------|--------------------------------------|--|-----|------|------|------|
| V <sub>(BR)CEO</sub> | Collector-Emitter Breakdown Voltage  | I <sub>C</sub> = -1mA; I <sub>B</sub> = 0    | -60 |      |      | V    |
| V <sub>(BR)CBO</sub> | Collector-Base Breakdown Voltage     | I <sub>C</sub> = -50 μ A; I <sub>E</sub> = 0 | -60 |      |      | V    |
| V <sub>(BR)EBO</sub> | Emitter-Base Breakdown Voltage       | I <sub>E</sub> = -50 μ A; I <sub>C</sub> = 0 | -5  |      |      | V    |
| V <sub>CE(sat)</sub> | Collector-Emitter Saturation Voltage | I <sub>C</sub> = -2A; I <sub>B</sub> = -0.2A |     |      | -2.0 | V    |
| V <sub>BE(sat)</sub> | Base-Emitter Saturation Voltage      | I <sub>C</sub> = -2A; I <sub>B</sub> = -0.2A |     |      | -1.5 | V    |
| Ісво                 | Collector Cutoff Current             | V <sub>CB</sub> = -60V; I <sub>E</sub> = 0   |     |      | -10  | μA   |
| I <sub>EBO</sub>     | Emitter Cutoff Current               | V <sub>EB</sub> = -4V; I <sub>C</sub> = 0    |     |      | -10  | μA   |
| hfe                  | DC Current Gain                      | Ic= -0.5A; Vce= -5V                          | 60  |      | 320  |      |

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

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

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