

isc Silicon PNP Power Transistor

BD808

DESCRIPTION

- DC Current Gain -
: $h_{FE} = 30 @ I_C = -2A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = -60V(\text{Min})$
- Complement to Type BD807

APPLICATIONS

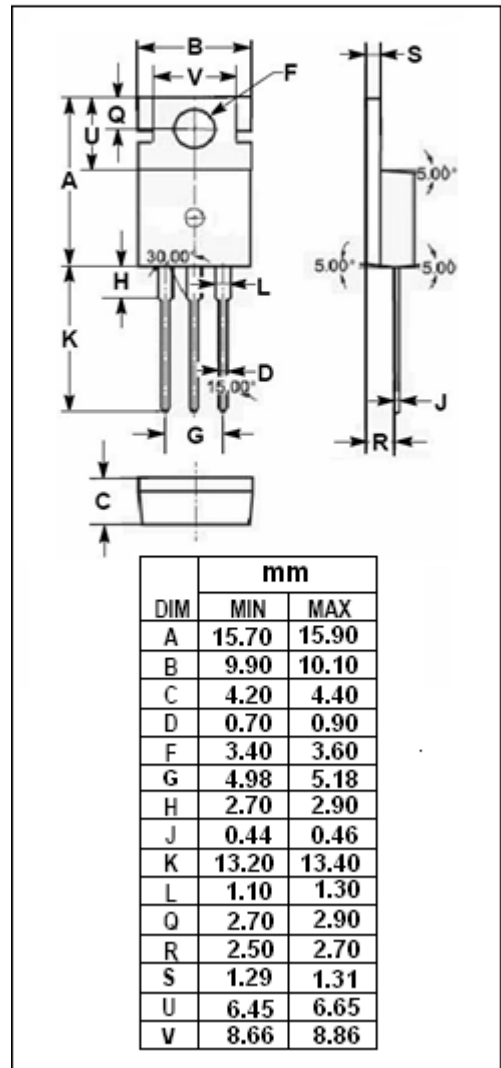
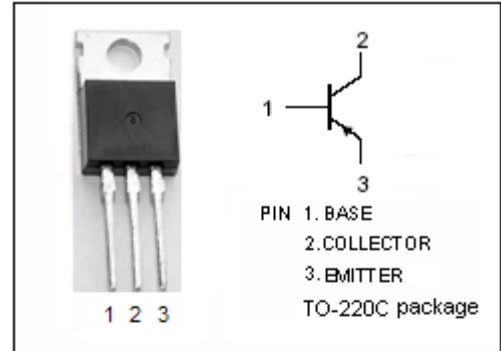
- Designed for use in high power audio amplifiers utilizing complementary or quasi complementary circuits.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------|
| V_{CBO} | Collector-Base Voltage | -70 | V |
| V_{CEO} | Collector-Emitter Voltage | -60 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current-Continuous | -10 | A |
| I_B | Base Current | -6 | A |
| P_C | Collector Power Dissipation @ $T_C=25^\circ C$ | 90 | W |
| T_J | Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^\circ C$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|------|--------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 1.39 | $^\circ C/W$ |



isc Silicon PNP Power Transistor**BD808****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|----------------|--------------------------------------|--|-----|------|------|
| $V_{CEO(SUS)}$ | Collector-Emitter Sustaining Voltage | $I_C = -200\text{mA}; I_B = 0$ | -60 | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C = -4\text{A}; I_B = -0.4\text{A}$ | | -1.1 | V |
| $V_{BE(on)}$ | Base-Emitter On Voltage | $I_C = -4\text{A}; V_{CE} = -2\text{V}$ | | -1.6 | V |
| I_{CBO} | Collector Cutoff Current | $V_{CB} = -70\text{V}; I_E = 0$ | | -1.0 | mA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB} = -5\text{V}; I_C = 0$ | | -2.0 | mA |
| h_{FE-1} | DC Current Gain | $I_C = -2\text{A}; V_{CE} = -2\text{V}$ | 30 | | |
| h_{FE-2} | DC Current Gain | $I_C = -4\text{A}; V_{CE} = -2\text{V}$ | 15 | | |
| f_T | Current-Gain—Bandwidth Product | $I_C = -1.0\text{A}; V_{CE} = -10\text{V}; f_{test} = 1.0\text{MHz}$ | 1.5 | | MHz |