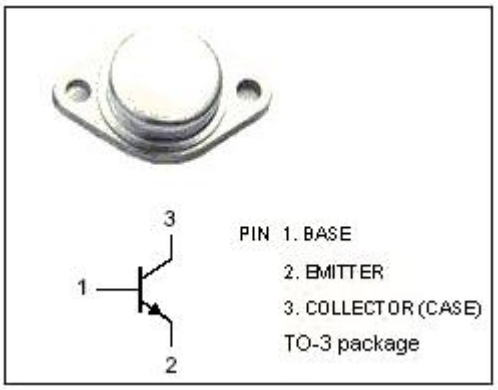
# isc Silicon NPN Power Transistor 2SC2337

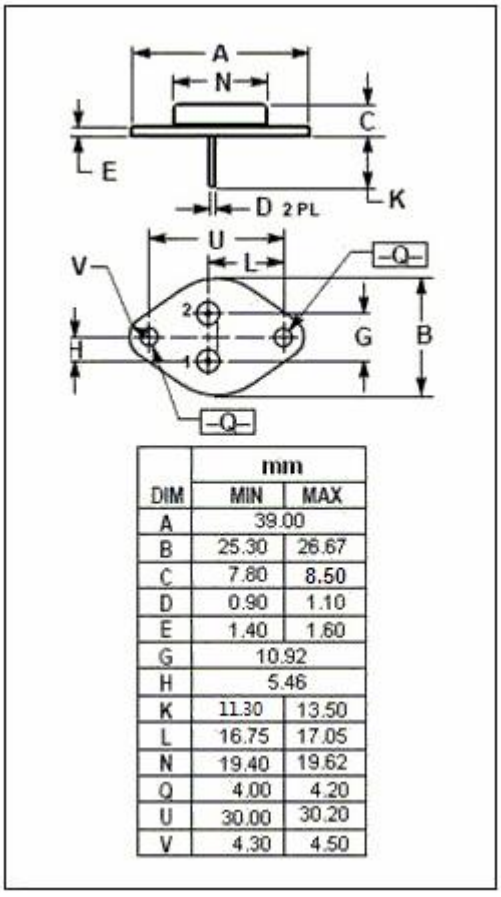



## DESCRIPTION

- High Current Capability
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 130V(Min.)
- Complement to Type 2SA1007
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Designed for audio and general purpose applications.




| DIM | mm MIN | MAX |
|---|---|---|
| A | 39.00 | |
| B | 25.30 | 26.67 |
| C | 7.80 | 8.50 |
| D | 0.90 | 1.10 |
| E | 1.40 | 1.60 |
| G | 10.92 | |
| H | 5.46 | |
| K | 11.30 | 13.50 |
| L | 16.75 | 17.05 |
| N | 19.40 | 19.62 |
| Q | 4.00 | 4.20 |
| U | 30.00 | 30.20 |
| V | 4.30 | 4.50 |

## ABSOLUTE MAXIMUM RATINGS($T_a$=25℃)

| SYMBOL | PARAMETER | VALUE | UNIT |
|---|---|---|---|
| $V_{CBO}$ | Collector-Base Voltage | 150 | V |
| $V_{CEO}$ | Collector-Emitter Voltage | 130 | V |
| $V_{EBO}$ | Emitter-Base Voltage | 6 | V |
| $I_C$ | Collector Current-Continuous | 10 | A |
| $P_C$ | Collector Power Dissipation @$T_C$=25℃ | 100 | W |
| $T_j$ | Junction Temperature | 150 | ℃ |
| $T_{stg}$ | Storage Temperature | -55~150 | ℃ |

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## ELECTRICAL CHARACTERISTICS

**Tj=25℃ unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C$= 30mA; $I_B$= 0 | 130 | | | V |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage | $I_C$= 1mA; $I_E$= 0 | 150 | | | V |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage | $I_E$= 1mA; $I_C$= 0 | 6 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C$= 5A; $I_B$= 0.5A | | | 2.0 | V |
| $I_{CBO}$ | Collector Cutoff Current | $V_{CB}$= 150V; $I_E$= 0 | | | 50 | μA |
| $I_{EBO}$ | Emitter Cutoff Current | $V_{EB}$= 6V; $I_C$= 0 | | | 50 | μA |
| $h_{FE-1}$ | DC Current Gain | $I_C$= 2A; $V_{CE}$= 5V | 40 | | 320 | |
| $h_{FE-2}$ | DC Current Gain | $I_C$= 5A; $V_{CE}$= 5V | 20 | | | |
| $f_T$ | Current-Gain—Bandwidth Product | $I_C$= 1A; $V_{CE}$= 10V | | 70 | | MHz |
| $C_{OB}$ | Collector Output Capacitance | $I_E$=0; $V_{CB}$=10V; f=1MHz | | 150 | | pF |