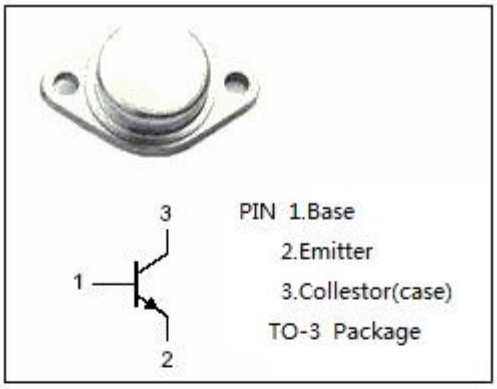
# isc Silicon NPN Power Transistor BDY26C

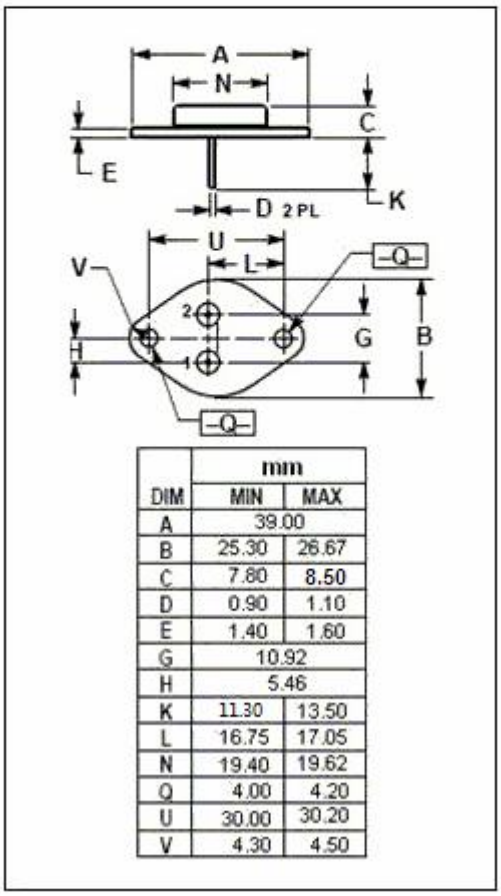
## DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 180V(Min.)
- Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= 0.6V(Max)@ $I_C$ = 2A
- High Switching Speed




## APPLICATIONS

- Designed for LF signal powe amplifier 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 | 300 | V |
| $V_{CEO}$ | Collector-Emitter Voltage | 180 | V |
| $V_{EBO}$ | Emitter-Base Voltage | 10 | V |
| $I_C$ | Collector Current-Continuous | 6 | A |
| $I_B$ | Base Current | 3 | A |
| $P_C$ | Collector Power Dissipation@$T_C$=25℃ | 87.5 | W |
| $T_J$ | Junction Temperature | 200 | ℃ |
| $T_{stg}$ | Storage Temperature | -65~200 | ℃ |

## THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---|---|---|---|
| $R_{th\ j\text{-}c}$ | Thermal Resistance,Junction to Case | 2.0 | ℃/W |



Downloaded from Alldatasheet.com

# isc Silicon NPN Power Transistors BDY26C

## ELECTRICAL CHARACTERISTICS

**$T_C$=25℃ unless otherwise specified**

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---|---|---|---|---|---|---|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C$= 50mA; $I_B$= 0 | 180 | | | V |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage | $I_C$= 1mA; $I_E$= 0 | 300 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C$= 2A; $I_B$= 0.25A | | | 0.6 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C$= 2A; $I_B$= 0.25A | | | 1.2 | V |
| $I_{CES}$ | Collector Cutoff Current | $V_{CE}$= 250V; $V_{BE}$= 0 | | | 1.0 | mA |
| $I_{CEO}$ | Collector Cutoff Current | $V_{CE}$= 180V; $I_B$= 0 | | | 1.0 | mA |
| $I_{EBO}$ | Emitter Cutoff Current | $V_{EB}$= 10V; $I_C$= 0 | | | 1.0 | mA |
| $h_{FE}$ | DC Current Gain | $I_C$= 2A; $V_{CE}$= 4V | 75 | | 180 | |
| $f_T$ | Current Gain-Bandwidth Product | $I_C$= 0.5A; $V_{CE}$= 15V; f=10MHz | 10 | | | MHz |
| Switching Times | | | | | | |
| $t_{on}$ | Turn-On Time | $I_C$= 5A; $I_B$= 1A | | | 1 | μs |
| $t_{off}$ | Turn-Off Time | $I_C$= 5A; $I_{B1}$= 1A; $I_{B2}$= -0.5A | | | 6 | μs |



Downloaded from Alldatasheet.com