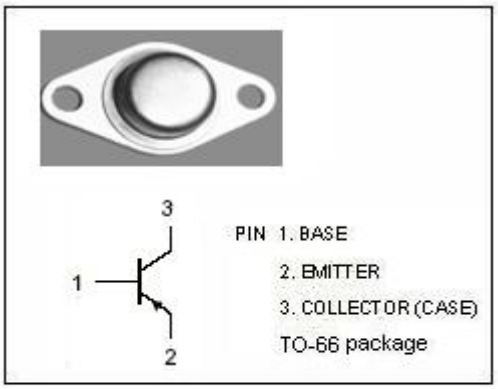
# isc Silicon PNP Power Transistors 3CD3C

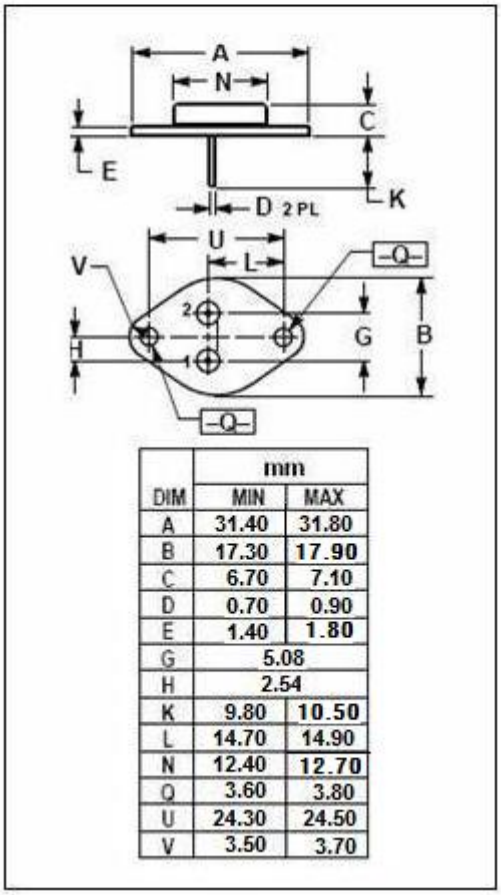
## DESCRIPTION

- Large collector current
- Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation




## APPLICATIONS

- Designed for use in DC-DC converter
- Driver of solenoid or motor




| DIM | mm MIN | MAX |
|---|---|---|
| A | 31.40 | 31.80 |
| B | 17.30 | 17.90 |
| C | 6.70 | 7.10 |
| D | 0.70 | 0.90 |
| E | 1.40 | 1.80 |
| G | 5.08 | |
| H | 2.54 | |
| K | 9.80 | 10.50 |
| L | 14.70 | 14.90 |
| N | 12.40 | 12.70 |
| Q | 3.60 | 3.80 |
| U | 24.30 | 24.50 |
| V | 3.50 | 3.70 |

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|---|---|---|---|
| $V_{CBO}$ | Collector-Base Voltage | -80 | V |
| $V_{CEO}$ | Collector-Emitter Voltage | -80 | V |
| $V_{EBO}$ | Emitter-Base Voltage | -4 | V |
| $I_C$ | Collector Current-Continuous | -1 | A |
| $P_C$ | Collector Power Dissipation@Tc=75℃ | 10 | W |
| $T_J$ | Junction Temperature | -55~150 | ℃ |
| $T_{stg}$ | Storage Temperature | -55~150 | ℃ |

## THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---|---|---|---|
| $R_{th\ j\text{-}c}$ | Thermal Resistance,Junction to Case | 12.5 | ℃/W |



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# isc Silicon PNP Power Transistors 3CD3C

## ELECTRICAL CHARACTERISTICS

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

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---|---|---|---|---|---|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C$=- 3mA ; $I_B$= 0 | -80 | | V |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage | $I_E$=- 3mA ; $I_C$= 0 | -4 | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C$=- 0.5A; $I_B$= -0.1A | | -1.5 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C$= -0.5A; $I_B$= -0.1A | | -1.5 | V |
| $I_{CEO}$ | Collector Cutoff Current | $V_{CE}$=- 80V; $I_B$= 0 | | -1.0 | mA |
| $I_{CBO}$ | Collector Cutoff Current | $V_{CB}$=- 80V; $I_E$= 0 | | -1.0 | mA |
| $I_{EBO}$ | Emitter Cutoff Current | $V_{EB}$= -4V; $I_C$= 0 | | -1.0 | mA |
| $h_{FE}$ | DC Current Gain | $I_C$= -0.5A; $V_{CE}$=-10V | 10 | 180 | |

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