

isc Silicon PNP Power Transistor

NTE68

DESCRIPTION

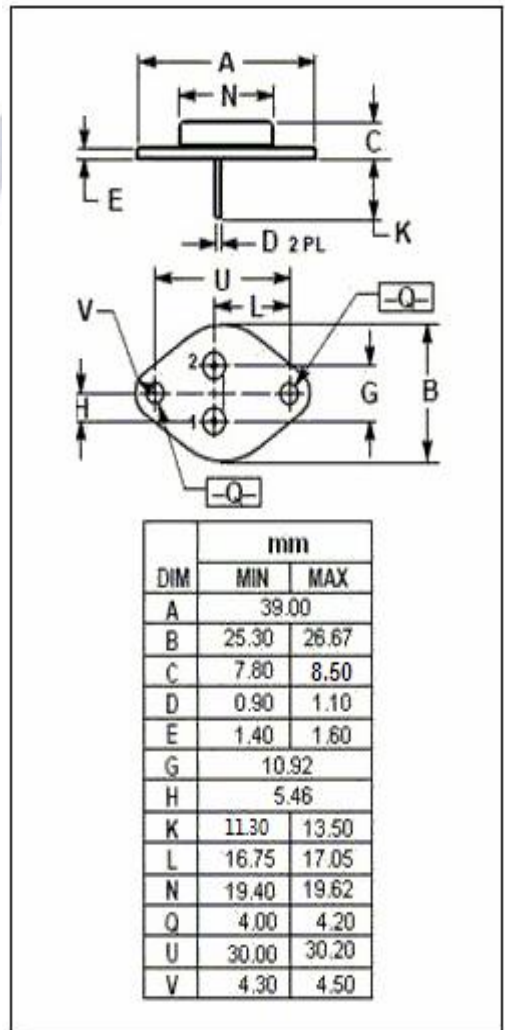
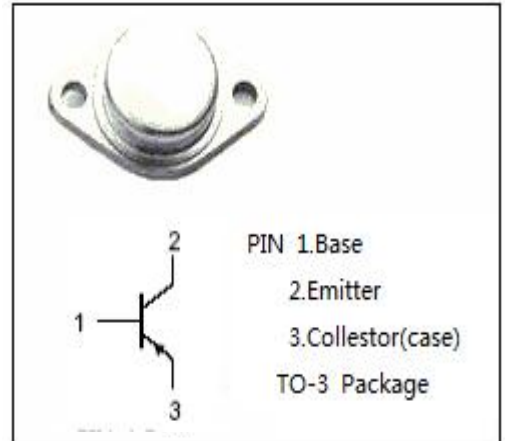
- With TO-3 packaging
- Large collector current
- Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--|---------|------|
| V _{CBO} | Collector-Base Voltage | -400 | V |
| V _{CEO} | Collector-Emitter Voltage | -250 | V |
| V _{EBO} | Emitter-Base Voltage | -5 | V |
| I _C | Collector Current-Continuous | -16 | A |
| I _{CP} | Collector Current-Pulse | -30 | A |
| I _B | Base Current-Continuous | -5 | A |
| P _C | Collector Power Dissipation @ T _C =25°C | 33 | W |
| | Collector Power Dissipation @ T _a =25°C | 0.26 | |
| T _J | Junction Temperature | -65~200 | °C |
| T _{stg} | Storage Temperature Range | -65~200 | °C |



isc Silicon PNP Power Transistor**NTE68****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|-----------------|--------------------------------------|--|------|------|------|---------------|
| $V_{CE(sat)-1}$ | Collector-Emitter Saturation Voltage | $I_C = -8\text{A}; I_B = -800\text{mA}$ | | | -1.4 | V |
| $V_{CE(sat)-2}$ | Collector-Emitter Saturation Voltage | $I_C = -16\text{A}; I_B = -3.2\text{A}$ | | | -4.0 | V |
| $V_{BE(on)}$ | Base-Emitter On Voltage | $I_C = -8\text{A}; V_{CE} = -4\text{V}$ | | | -2.2 | V |
| V_{CBO} | Collector-Base Breakdown Voltage | $I_C = -1\text{mA}; I_B = 0$ | -400 | | | |
| V_{CEO} | Collector-Emitter Breakdown Voltage | $I_C = -100\text{mA}; I_E = 0$ | -250 | | | |
| V_{EBO} | Emitter-Base Breakdown Voltage | $I_E = -1\text{mA}; I_B = 0$ | -5 | | | |
| I_{CEO} | Collector Cutoff Current | $V_{CE} = -200\text{V}; I_E = 0$ | | | -500 | μA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB} = -5\text{V}; I_C = 0$ | | | -500 | μA |
| h_{FE-1} | DC Current Gain | $I_C = -8\text{A}; V_{CE} = -4\text{V}$ | 15 | | 60 | |
| h_{FE-2} | DC Current Gain | $I_C = -16\text{A}; V_{CE} = -4\text{V}$ | 5 | | | |