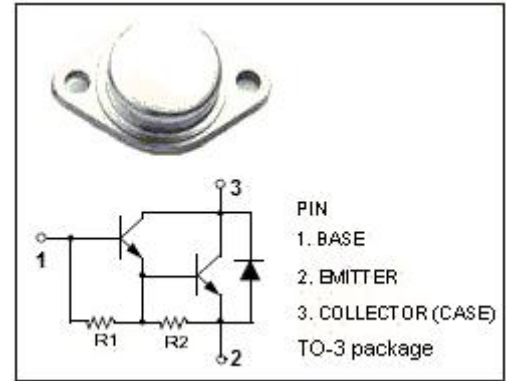


DESCRIPTION

- Built-in Base-Emitter Shunt Resistors
- High DC current gain-
 $h_{FE} = 750$ (Min) @ $I_C = 10$ Adc
- Collector-Emitter Sustaining Voltage-
 $V_{CEO(SUS)} = 100V$ (Min)
- Complement to type 2N6287

APPLICATIONS

- Intended for general purpose amplifier and low frequency switching applications, such as linear and switching industrial equipment.

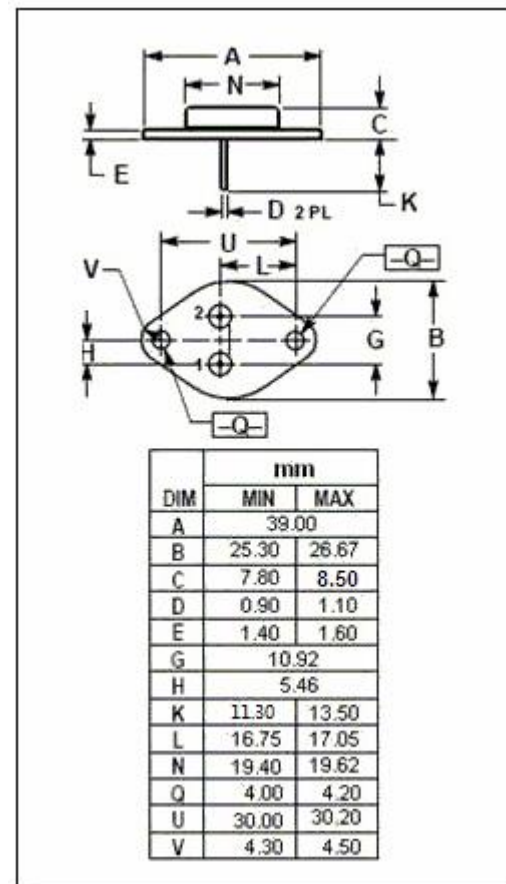


ABSOLUTE MAXIMUM RATINGS(T_c=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--|---------|------|
| V _{CBO} | Collector-Base Voltage | 100 | V |
| V _{CEO} | Collector-Emitter Voltage | 100 | V |
| V _{EBO} | Emitter-Base Voltage | 5.0 | V |
| I _C | Collector Current -Continuous | 20 | A |
| I _{CP} | Collector Current-Peak | 40 | A |
| I _B | Base Current | 0.5 | A |
| P _C | Collector Power Dissipation@T _c =25°C | 160 | W |
| T _j | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature | -65~150 | °C |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|-------------------------------------|------|------|
| R _{th j-c} | ThermalResistance, Junction to Case | 1.09 | °C/W |



ELECTRICAL CHARACTERISTICS

$T_C=25^{\circ}\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|-----------------|--------------------------------------|--|-----|------------|------|
| $V_{CE0(SUS)}$ | Collector-Emitter Sustaining Voltage | $I_C= 50\text{mA}$; $I_B= 0$ | 100 | | V |
| $V_{CE(sat)-1}$ | Collector-Emitter Saturation Voltage | $I_C= 10\text{A}$; $I_B= 40\text{mA}$ | | 2.0 | V |
| $V_{CE(sat)-2}$ | Collector-Emitter Saturation Voltage | $I_C= 20\text{A}$; $I_B= 200\text{mA}$ | | 3.0 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation voltage | $I_C= 20\text{A}$; $I_B= 200\text{mA}$ | | 4.0 | V |
| $V_{BE(on)}$ | Base-Emitter On voltage | $I_C= 10\text{A}$; $V_{CE}= 3\text{V}$ | | 2.8 | V |
| I_{CEO} | Collector Cutoff current | $V_{CE}= 50\text{V}$; $I_B=0$ | | 1.0 | mA |
| I_{CEX} | Collector Cutoff current | $V_{CE}= 100\text{V}$; $V_{BE(off)}= 1.5\text{V}$ $V_{CE}= 100\text{V}$; $V_{BE(off)}= 1.5\text{V}$, $T_C=150^{\circ}\text{C}$ | | 0.5 5.0 | mA |
| I_{EBO} | Emitter Cut-off current | $V_{EB}= 5\text{V}$; $I_C= 0$ | | 2.0 | mA |
| h_{FE-1} | DC Current Gain | $I_C= 10\text{A}$; $V_{CE}= 3\text{V}$ | 750 | 18000 | |
| h_{FE-2} | DC Current Gain | $I_C= 20\text{A}$; $V_{CE}= 3\text{V}$ | 100 | | |
| C_{OB} | Output Capacitance | $I_E=0$; $V_{CB}= 10\text{V}$; $f_{test}= 1.0\text{MHz}$ | | 400 | pF |