

isc Silicon PNP Power Transistor

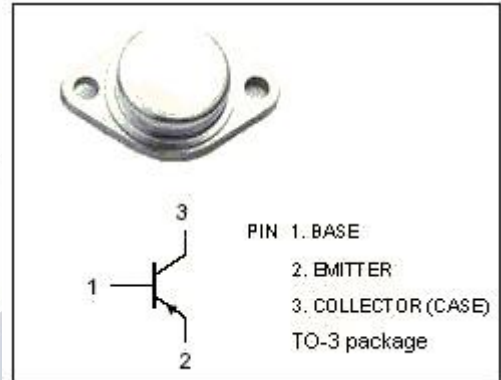
2N3173

DESCRIPTION

- Excellent Safe Operating Area
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = -0.75V(\text{Max}) @ I_c = -1A$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- All semelab hermetically sealed products, can be processed in accordance with the requirements of BS, CECC, and JAN, JANTX and JANTXV and JAN specifications.

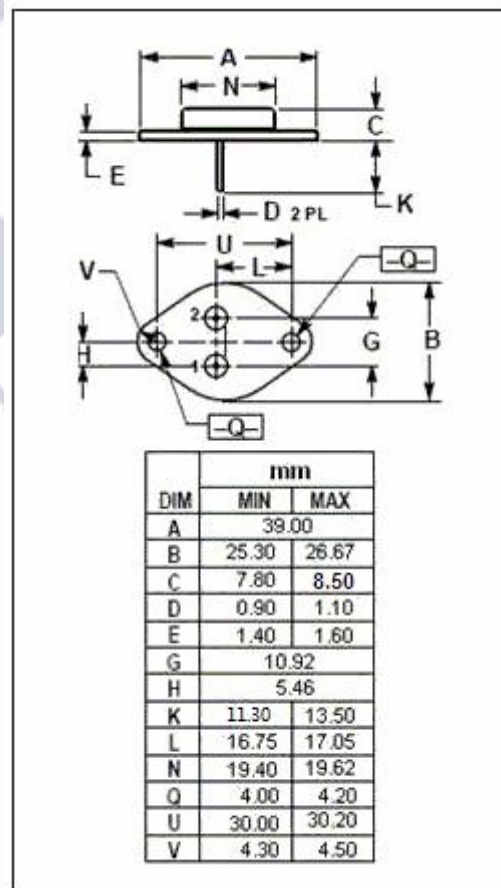


ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|----------------|--------------------------------------------------------|----------|------------------|
| V_{CBO} | Collector-Base Voltage | -80 | V |
| V_{CEO} | Collector-Emitter Voltage | -80 | V |
| V_{EBO} | Emitter-Base Voltage | -10 | V |
| I_c | Collector Current-Continuous | -3 | A |
| P_c | Collector Power Dissipation @ $T_c = 25^\circ\text{C}$ | 75 | W |
| T_j, T_{stg} | Operating and Storage Junction Temperature Range | -65~+150 | $^\circ\text{C}$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|------|--------------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 1.67 | $^\circ\text{C/W}$ |



isc Silicon PNP Power Transistors**2N3173****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|---------------|--------------------------------------|-----------------------------------------|-----|-------|------|
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C = -1\text{A}; I_B = -0.14\text{A}$ | | -0.75 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C = -1\text{A}; I_B = -0.14\text{A}$ | | -1.8 | V |
| I_{CEO} | Collector Cutoff Current | $V_{CE} = -80\text{V}; I_B = 0$ | | -0.1 | mA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB} = -10\text{V}; I_C = 0$ | | -0.1 | mA |
| h_{FE} | DC Current Gain | $I_C = -1\text{A}; V_{CE} = -3\text{V}$ | 12 | 36 | |