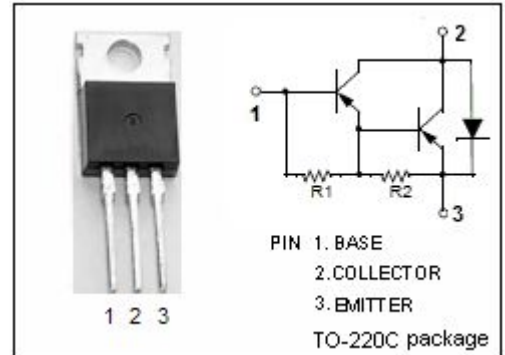


DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(sus)} = -100V(\text{Min})$
- High DC Current Gain
: $h_{FE} = 750(\text{Min}) @ I_C = -3A$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -2.0 V (\text{Max}) @ I_C = -3.0 A$

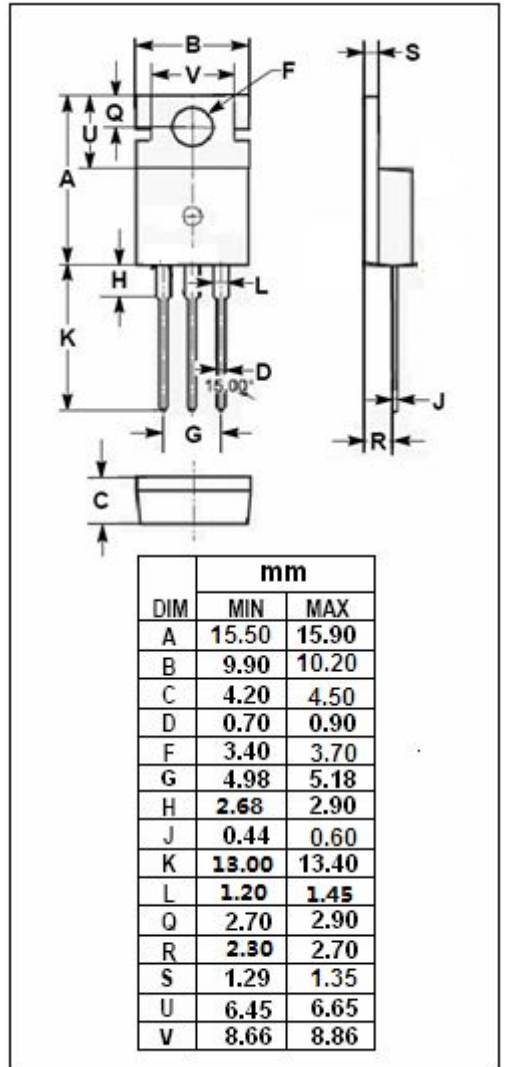
APPLICATIONS

- Designed for general-purpose amplifier and low-speed switching applications.



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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | -100 | V |
| V_{CEO} | Collector-Emitter Voltage | -100 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current-Continuous | -8 | A |
| I_{CP} | Collector Current-Peak | -12 | A |
| I_B | Base Current-Continuous | -0.2 | A |
| P_C | Collector Power Dissipation @ $T_C=25^\circ\text{C}$ | 60 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -65~150 | $^\circ\text{C}$ |



THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|------|---------------------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 1.92 | $^\circ\text{C}/\text{W}$ |

ELECTRICAL CHARACTERISTICS

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

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------|--------------------------------------|---|------|------|------|------|
| $V_{CEO(SUS)}$ | Collector-Emitter Breakdown Voltage | $I_C = -50\text{mA}; I_B = 0$ | -100 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C = -3\text{A}; I_B = -12\text{mA}$ | | | -2.0 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C = -3\text{A}; I_B = -12\text{mA}$ | | | -2.5 | V |
| I_{CBO} | Collector Cutoff Current | $V_{CB} = -100\text{V}; I_E = 0$ | | | -0.2 | mA |
| I_{CEO} | Collector Cutoff Current | $V_{CE} = -50\text{V}; I_B = 0$ | | | -0.5 | mA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB} = -5\text{V}; I_C = 0$ | | | -2 | mA |
| h_{FE} | DC Current Gain | $I_C = -3\text{A}; V_{CE} = -3\text{V}$ | 750 | | | |