

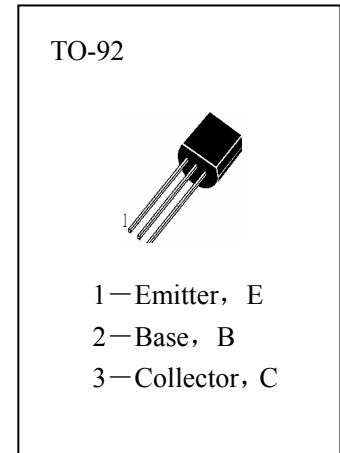


■ GENERAL PURPOSE AMPLIFIER AND LOW NOISE

AMPLIFIER APPLICATIONS

■ ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)

- T<sub>stg</sub>—Storage Temperature..... -55~150°C
- T<sub>j</sub>—Junction Temperature.....150°C
- P<sub>C</sub>—Collector Dissipation.....625mW
- V<sub>CB0</sub>—Collector-Base Voltage.....-40V
- V<sub>CEO</sub>—Collector-Emitter Voltage.....-40V
- V<sub>EBO</sub>—Emitter-Base Voltage.....-7V
- I<sub>C</sub>—Collector Current.....-200mA
- I<sub>B</sub>—Base Current.....-200mA



■ ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

| Symbol               | Characteristics                       | Min | Typ   | Max   | Unit | Test Conditions                                  |
|----------------------|---------------------------------------|-----|-------|-------|------|--|
| BV <sub>CEO</sub>    | Collector-Emitter Breakdown Voltage   | -40 |       |       | V    | I <sub>C</sub> =-1mA, I <sub>B</sub> =0          |
| I <sub>CBO</sub>     | Collector Cut-off Current             |     |       | -50   | nA   | V <sub>CB</sub> =-30V, I <sub>E</sub> =0         |
| I <sub>EBO</sub>     | Emitter Cut-off Current               |     |       | -100  | nA   | V <sub>EB</sub> =-6V, I <sub>C</sub> =0          |
| H <sub>FE</sub>      | DC Current Gain                       | 70  |       | 400   |      | V <sub>CE</sub> =-5V, I <sub>C</sub> =-2mA       |
| V <sub>CE(sat)</sub> | Collector- Emitter Saturation Voltage |     |       | -0.22 | V    | I <sub>C</sub> =-50mA, I <sub>B</sub> =-10mA     |
| V <sub>BE</sub>      | Base-Emitter Voltage                  |     | -0.65 |       | V    | V <sub>CE</sub> =-5V, I <sub>C</sub> =-2mA       |
| f <sub>T</sub>       | Current Gain-Bandwidth Product        | 150 | 300   |       | MHz  | V <sub>CE</sub> =-5V, I <sub>C</sub> =-10mA      |
| C <sub>ob</sub>      | Output Capacitance                    |     |       | 4.5   | pF   | V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz |