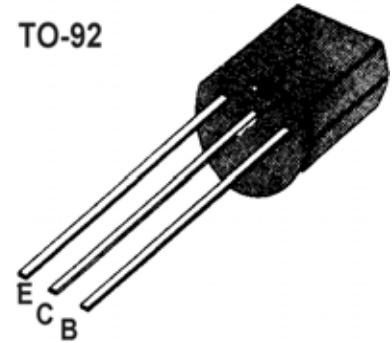


■ ■ APPLICATION: General Purpose Applications.

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

| PARAMETER | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|----------|------------------|
| Collector-base voltage | V_{CBO} | -50 | V |
| Collector-emitter voltage | V_{CEO} | -40 | V |
| Emitter-base voltage | V_{EBO} | -5 | V |
| Collector current | I_C | -150 | A |
| Collector Power Dissipation | P_C | 300 | W |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 55~150 | $^\circ\text{C}$ |


■ ■ ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

| PARAMETER | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITION |
|--------------------------------------|---------------|------|------|------|---------------|------------------------------------|
| DC Current Gain | h_{FE} | 120 | | 820 | | $V_{CE} = -6V, I_C = -1mA$ |
| Collector Cut-off Current | I_{CBO} | | | -0.5 | μA | $V_{CB} = -30V, I_E = 0$ |
| Emitter Cut-off Current | I_{EBO} | | | -0.5 | μA | $V_{EB} = -3V, I_C = 0$ |
| Collector-Base Breakdown Voltage | BV_{CBO} | -50 | | | V | $I_C = -0.02mA, I_E = 0$ |
| Collector-Emitter Breakdown Voltage | BV_{CEO} | -40 | | | V | $I_C = -1mA, I_B = 0$ |
| Emitter-Base Breakdown Voltage | BV_{EBO} | -5 | | | V | $I_E = -0.02mA, I_C = 0$ |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | | | -0.4 | V | $I_C = -50mA, I_B = -5mA$ |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | | | -1.1 | V | $I_C = -50mA, I_B = -5mA$ |
| Gain bandwidth product | f_T | | 180 | | MHz | $I_C = -2mA, V_{CE} = -12V$ |
| Common Base Output Capacitance | C_{ob} | | 4 | | PF | $V_{CB} = -10V, I_E = 0, f = 1MHz$ |

■ ■ h_{FE} Classification And Marking

| Classification | Q | R | S | E |
|----------------|---------|---------|---------|---------|
| h_{FE} | 120~270 | 180~390 | 270~560 | 390~820 |