

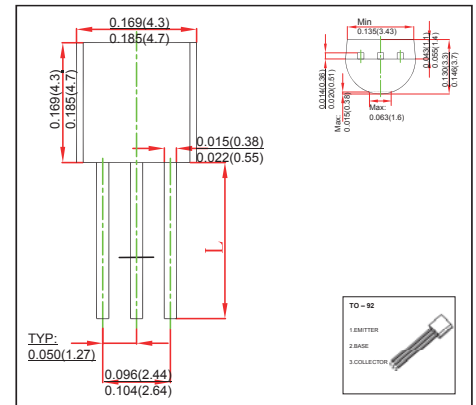
TO-92 Plastic-Encapsulate Transistors

FEATURES

- High Collector Power Dissipation
- Complementary to 2SD1616/2SD1616A
- TRANSISTOR (PNP)

MECHANICAL DATA

- Case style: TO-92 molded plastic
- Mounting position: any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|-------------------------------|-----------|------------|------|
| Collector-Base Voltage | V_{CBO} | -60 -80 | V |
| Collector-Emitter Voltage | V_{CEO} | -50 -60 | V |
| Emitter-Base Voltage | V_{EBO} | -6 | V |
| Collector Current -Continuous | I_C | -1 | A |
| Collector Power Dissipation | P_C | 0.75 | W |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature | T_{stg} | -55 ~ +150 | °C |

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|----------------------------|-----------------------------------------------------------------------------------|------------|------|------|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C = -100\mu A, I_E = 0$ | -60 -80 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = -1mA, I_B = 0$ | -50 -60 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E = -100\mu A, I_C = 0$ | -6 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = -60V, I_E = 0$ $V_{CB} = -60V, I_E = 0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -6V, I_C = 0$ | | | -0.1 | μA |
| DC current gain | $h_{FE(1)}$ $h_{FE(2)}$ | $V_{CE} = -2V, I_C = -0.1A$ $V_{CE} = -2V, I_C = -1A$ | 135 81 | | 600 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -1A, I_B = -50mA$ | | | -0.3 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -1A, I_B = -50mA$ | | | -1.2 | V |
| Base-emitter voltage | V_{BE} | $V_{CE} = -2V, I_C = -0.05A$ | -0.6 | | -0.7 | |
| Transition frequency | f_T | $V_{CE} = -2V, I_C = -0.1A$ | 70 | | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | | 25 | | pF |
| Turn-on time | t_{on} | $V_{CC} = -10V, I_C = -0.1A, I_{B1} = -I_{B2} = -0.01A,$ $V_{BE(Off)} = 2to3V$ | | 0.07 | | us |
| Storage time | t_s | | | 0.7 | | us |
| Fall time | t_f | | | 0.07 | | us |

RATINGS AND CHARACTERISTIC CURVES

