

A92 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM}: 0.625 \text{ W (Tamb=25}^\circ\text{C)}$$

Collector current

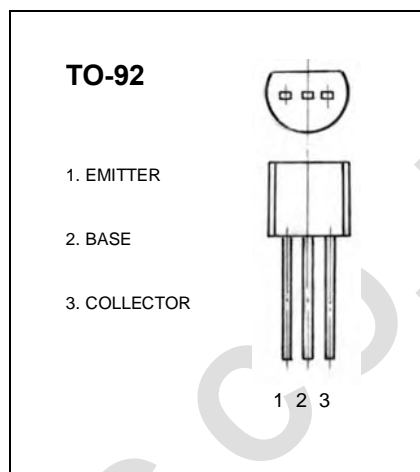
$$I_{CM}: -0.5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -300 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|--|------|-----|-------|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C = -100\mu\text{A}, I_E = 0$ | -300 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = -1 \text{ mA}, I_B = 0$ | -300 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E = -100\mu\text{A}, I_C = 0$ | -5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = -200 \text{ V}, I_E = 0$ | | | -0.25 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -5 \text{ V}, I_C = 0$ | | | -0.1 | μA |
| DC current gain | $h_{FE(1)}$ | $V_{CE} = -10 \text{ V}, I_C = -1 \text{ mA}$ | 60 | | | |
| | $h_{FE(2)}$ | $V_{CE} = -10 \text{ V}, I_C = -10 \text{ mA}$ | 80 | | 250 | |
| | $h_{FE(3)}$ | $V_{CE} = -10 \text{ V}, I_C = -80 \text{ mA}$ | 60 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -20 \text{ mA}, I_B = -2 \text{ mA}$ | | | -0.2 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -20 \text{ mA}, I_B = -2 \text{ mA}$ | | | -0.9 | V |
| Transition frequency | f_T | $V_{CE} = -20 \text{ V}, I_C = -10 \text{ mA}$ $f = 30 \text{ MHz}$ | 50 | | | MHz |

CLASSIFICATION OF $h_{FE(2)}$

| Rank | A | B ₁ | B ₂ | C |
|-------|--------|----------------|----------------|---------|
| Range | 80-100 | 100-150 | 150-200 | 200-250 |