

2SB985 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM}: 1 \text{ W (Tamb=25°C)}$$

Collector current

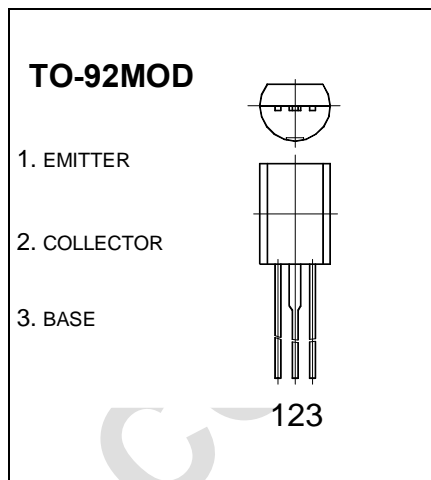
$$I_{CM}: -3 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -60 \text{ V}$$

Operating and storage junction temperature range

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



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

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|------------------------------------|-----|-----|------|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C = -10\mu A, I_E = 0$ | -60 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = -1mA, I_B = 0$ | -50 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E = -10\mu A, I_C = 0$ | -6 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = -40V, I_E = 0$ | | | -1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -4V, I_C = 0$ | | | -1 | μA |
| DC current gain | $h_{FE(1)}$ | $V_{CE} = -2V, I_C = -100mA$ | 100 | | 560 | |
| | $h_{FE(2)}$ | $V_{CE} = -2V, I_C = -3A$ | 40 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -2A, I_B = -100mA$ | | | -0.7 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -2A, I_B = -100mA$ | | | -1.2 | V |
| Transition frequency | f_T | $V_{CE} = -10V, I_C = -50mA$ | 100 | | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | | | 50 | pF |

CLASSIFICATION OF $h_{FE(1)}$

| Rank | R | S | T | U |
|-------|---------|---------|---------|---------|
| Range | 100-200 | 140-280 | 200-400 | 280-560 |