

BF240 TRANSISTOR (NPN)

FEATURES

Power dissipation

$$P_{CM}: 0.3 \text{ W (Tamb=25°C)}$$

Collector current

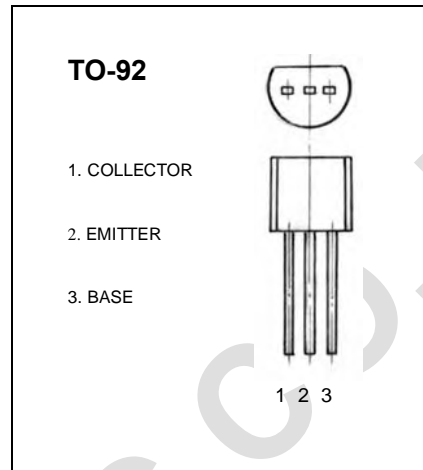
$$I_{CM}: 0.025 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: 40 \text{ V}$$

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 | $V_{(BR)CBO}$ | $I_C = 100\mu A, I_E = 0$ | 40 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = 1 \text{ mA}, I_B = 0$ | 40 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E = 100\mu A, I_C = 0$ | 4 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = 20V, I_E = 0$ | | | 0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = 4V, I_C = 0$ | | | 0.1 | μA |
| DC current gain | h_{FE} | $V_{CE} = 10V, I_C = 1mA$ | 67 | | 220 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = 10mA, I_B = 1mA$ | | | 0.3 | V |
| Collector-emitter voltage | V_{BE} | $V_{CE} = 10V, I_C = 1mA$ | | | 0.775 | V |
| Transition frequency | f_T | $V_{CE} = 10V, I_C = 1mA$ $f = 100MHz$ | 150 | | | MHz |