



PNP Silicon Planar Epitaxial Transistors

FEATURES

Power dissipation

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

Collector current

$$I_{CM}: -0.1 \text{ A}$$

Collector-base voltage

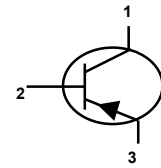
| | | | |
|-------------|-------|-----|---|
| V_{CBO} : | BC556 | -80 | V |
| | BC557 | -50 | V |
| | BC558 | -30 | V |

Operating and storage junction temperature range

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



- 1. COLLECTOR
- 2. BASE
- 3. EMITTER



TO-92

Electrical Characteristics (Ta=25 °C unless otherwise specified)

| | | | SPEC | min | max | unit |
|--------------------------------------|----------------------|---------------|--|---------------------------------|------|---------------|
| Collector-base breakdown voltage | BC556 | V_{CBO} | $I_C = -100\mu\text{A}, I_E = 0$ | -80 | | V |
| | BC557 | | | -50 | | |
| | BC558 | | | -30 | | |
| Collector-emitter breakdown voltage | BC556 | V_{CEO} | $I_C = -2\text{mA}, I_B = 0$ | -65 | | V |
| | BC557 | | | -45 | | |
| | BC558 | | | -30 | | |
| Emitter-base breakdown voltage | | V_{EBO} | $I_E = -100\mu\text{A}, I_C = 0$ | -6 | | V |
| Collector cut-off current | BC556 | I_{CBO} | $V_{CB} = -70\text{V}, I_E = 0$ | | -0.1 | μA |
| | BC557 | | | $V_{CB} = -45\text{V}, I_E = 0$ | | |
| | BC558 | | | $V_{CB} = -25\text{V}, I_E = 0$ | | |
| Collector cut-off current | BC556 | I_{CEO} | $V_{CE} = -60\text{V}, I_B = 0$ | | -0.1 | μA |
| | BC557 | | | $V_{CE} = -40\text{V}, I_B = 0$ | | |
| | BC558 | | | $V_{CE} = -25\text{V}, I_B = 0$ | | |
| Emitter cut-off current | BC556 | I_{EBO} | $V_{EB} = -5\text{V}, I_C = 0$ | | -0.1 | μA |
| | BC557 | | | | | |
| | BC558 | | | | | |
| DC current gain | BC556 | $h_{FE(1)}$ | $V_{CE} = -5\text{V}, I_C = -2\text{mA}$ | 120 | 500 | |
| | BC557 | | | 120 | 800 | |
| | BC558 | | | 120 | 800 | |
| | BC557A | | | 120 | 220 | |
| | BC556B/BC557B/BC558B | | | 180 | 460 | |
| | BC557C | | | 420 | 800 | |
| Collector-emitter saturation voltage | | $V_{CE(sat)}$ | $I_C = -100\text{mA}, I_B = -5\text{mA}$ | | -0.3 | V |
| Base-emitter saturation voltage | | $V_{BE(sat)}$ | $I_C = -100\text{mA}, I_B = -5\text{mA}$ | | -1 | V |
| Transition frequency | | f_T | $V_{CE} = -5\text{V}, I_C = -10\text{mA}$ $f = 100\text{MHz}$ | 150 | | MHz |