Elektronische Bauelemente

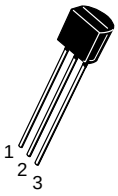
# BC556, B, C
# BC557, A, B, C
# BC558, A, B, C

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

## FEATURES PNP Transistor

TO-92





1. COLLECTOR
2. BASE
3. EMITTER

Power dissipation

$P_{CM:}$ 0.625 W (Tamb=25℃)

Collector current

$I_{CM:}$ - 0.1 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℃ to +150℃

## ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

| Parameter | | Symbol | Test conditions | MIN | MAX | UNIT |
|---|---|---|---|---|---|---|
| **Collector-base breakdown voltage** | **BC556** | $V_{CBO}$ | Ic= -100μA , $I_E$=0 | -80 | | V |
| | **BC557** | | | -50 | | |
| | **BC558** | | | -30 | | |
| **Collector-emitter breakdown voltage** | **BC556** | | $V_{CEO}$ = - 2mA, $I_B$=0 | -65 | | V |
| | **BC557** | | | -45 | | |
| | **BC558** | | | -30 | | |
| **Emitter-base breakdown voltage** | | $V_{EBO}$ | $I_E$= -100μA, $I_C$=0 | -6 | | V |
| **Collector cut-off current** | **BC556** | $I_{CBO}$ | $V_{CB}$= -70V, $I_E$=0 | | -0.1 | μA |
| | **BC557** | | $V_{CB}$= -45 V, $I_E$=0 | | | |
| | **BC558** | | $V_{CB}$= -25V, $I_E$=0 | | | |
| **Collector cut-off current** | **BC556** | $I_{CEO}$ | $V_{CE}$= -60 V, $I_B$=0 | | -0.1 | μA |
| | **BC557** | | $V_{CE}$= -40 V, $I_B$=0 | | | |
| | **BC558** | | $V_{CE}$= -25 V, $I_B$=0 | | | |
| **Emitter cut-off current** | **BC556** | $I_{EBO}$ | $V_{EB}$= -5V, $I_C$=0 | | -0.1 | μA |
| | **BC557** | | | | | |
| | **BC558** | | | | | |
| **DC current gain** | **BC556** | $h_{FE(1)}$ | $V_{CE}$=-5V, $I_C$= -2mA | 120 | 500 | |
| | **BC557** | | | 120 | 800 | |
| | **BC558** | | | 120 | 800 | |
| | **BC557A/558A** | | | 120 | 220 | |
| | **BC556B/BC557B/BC558B** | | | 180 | 460 | |
| | **BC556C/BC557C/BC558C** | | | 420 | 800 | |
| **Collector-emitter saturation voltage** | | $V_{CE(sat)}$ | $I_C$=-100 mA, $I_B$= -5mA | | -0.3 | V |
| **Base-emitter saturation voltage** | | $V_{BE(sat)}$ | $I_C$= -100 mA, $I_B$=-5mA | | -1 | V |
| **Transition frequency** | | $f_T$ | $V_{CE}$= -5V, $I_C$= -10mA f = 100MHz | 150 | | MHz |

Any changing of specification will not be informed individual

## Typical Characteristics

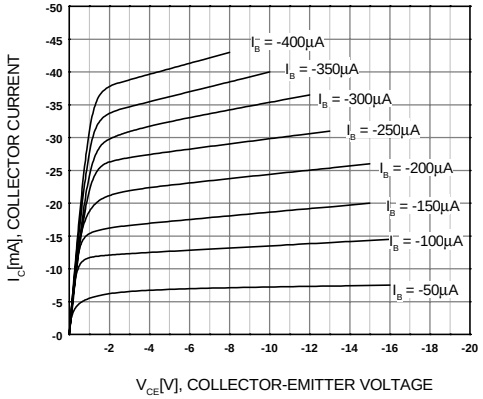



**Figure 1. Static Characteristic**

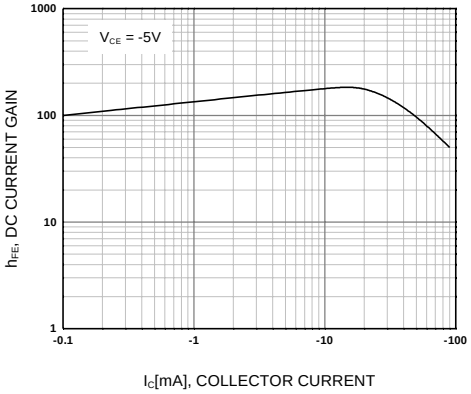



**Figure 2. DC current Gain**

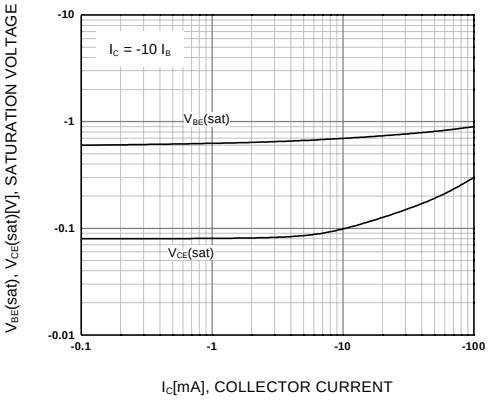



**Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage**

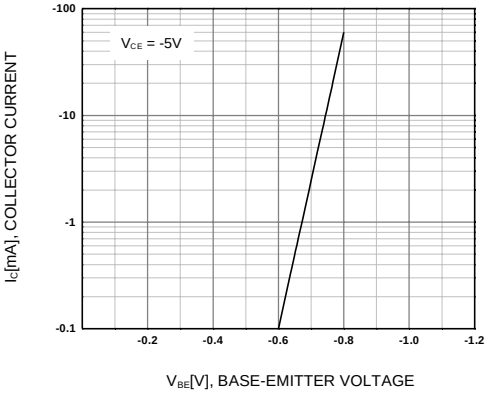



**Figure 4. Base-Emitter On Voltage**

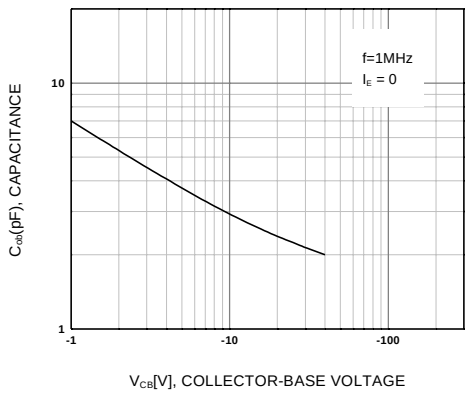



**Figure 5. Collector Output Capacitance**

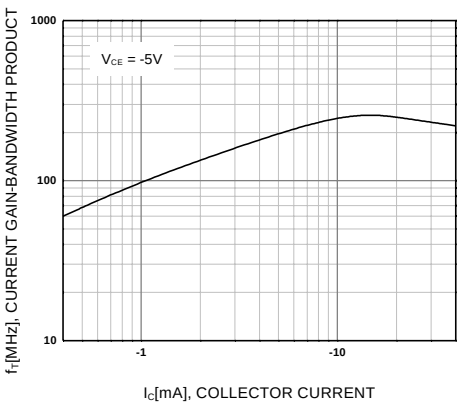
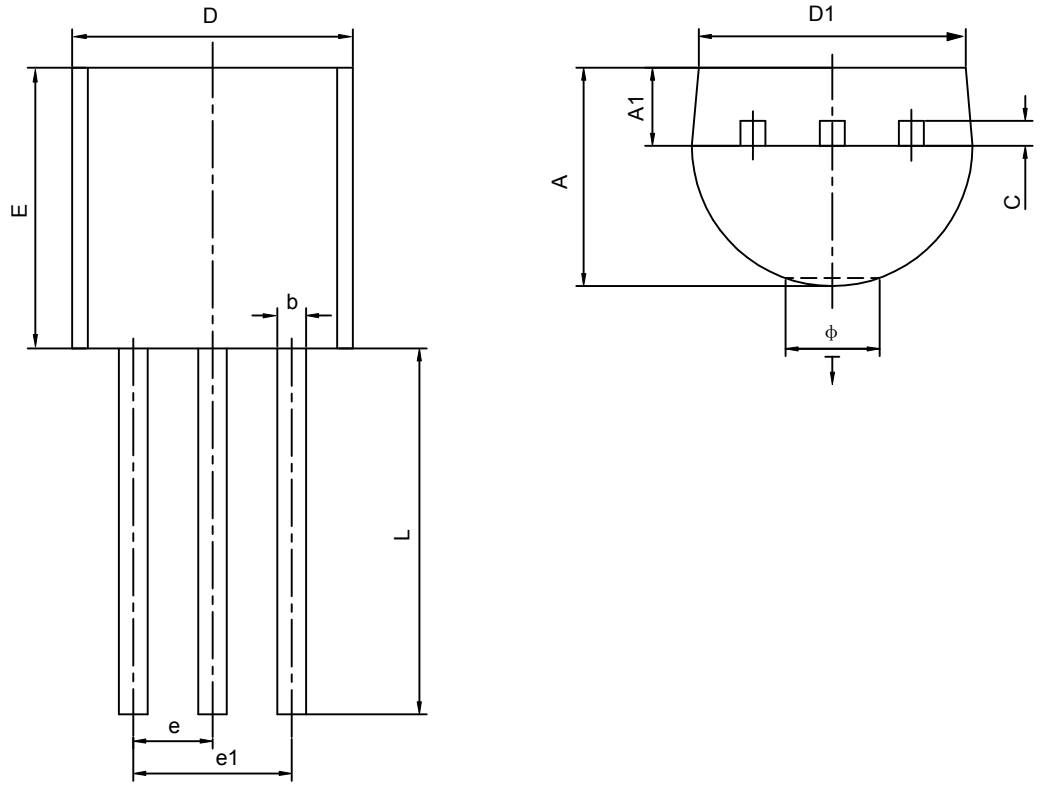



**Figure 6. Current Gain Bandwidth Product**

Any changing of specification will not be informed individual

## TO-92 PACKAGE OUTLINE DIMENSIONS




| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | 3.300 | 3.700 | 0.130 | 0.146 |
| A1 | 1.100 | 1.400 | 0.043 | 0.055 |
| b | 0.380 | 0.550 | 0.015 | 0.022 |
| c | 0.360 | 0.510 | 0.014 | 0.020 |
| D | 4.400 | 4.700 | 0.173 | 0.185 |
| D1 | 3.430 | | 0.135 | |
| E | 4.300 | 4.700 | 0.169 | 0.185 |
| e | 1.270TYP | | 0.050TYP | |
| e1 | 2.440 | 2.640 | 0.096 | 0.104 |
| L | 14.100 | 14.500 | 0.555 | 0.571 |
| Ö | | 1.600 | | 0.063 |
| ⊤ | 0.000 | 0.380 | 0.000 | 0.015 |