



DC COMPONENTS CO., LTD.

DISCRETE SEMICONDUCTORS

BC327

TECHNICAL SPECIFICATIONS OF PNP EPITAXIAL PLANAR TRANSISTOR

Description

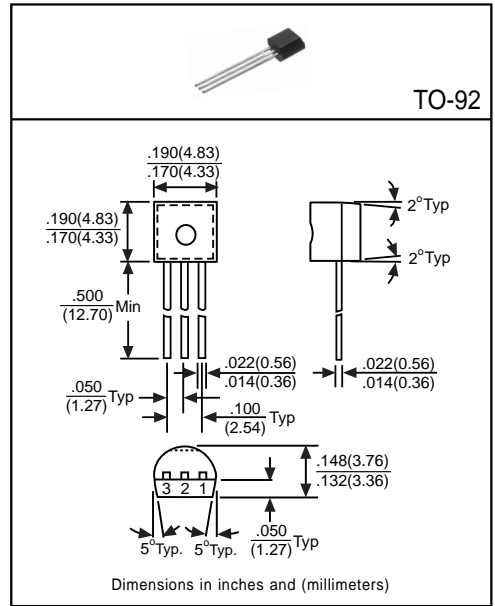
Designed for driver and output stage of audio amplifiers.

Pinning

- 1 = Collector
- 2 = Base
- 3 = Emitter

Absolute Maximum Ratings (TA=25°C)

| Characteristic | Symbol | Rating | Unit |
|---------------------------|------------------|-------------|------|
| Collector-Base Voltage | V _{CB0} | -50 | V |
| Collector-Emitter Voltage | V _{CE0} | -45 | V |
| Emitter-Base Voltage | V _{EB0} | -5 | V |
| Collector Current | I _C | -500 | mA |
| Total Power Dissipation | P _D | 625 | mW |
| Junction Temperature | T _J | +150 | °C |
| Storage Temperature | T _{STG} | -55 to +150 | °C |



Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

| Characteristic | Symbol | Min | Typ | Max | Unit | Test Conditions |
|---|----------------------|-----|-----|------|------|---|
| Collector-Base Breakdown Voltage | BV _{CB0} | -50 | - | - | V | I _C =-100μA, I _E =0 |
| Collector-Emitter Breakdown Voltage | BV _{CE0} | -45 | - | - | V | I _C =-10mA, I _B =0 |
| Emitter-Base Breakdown Voltage | BV _{EB0} | -5 | - | - | V | I _E =-100μA, I _C =0 |
| Collector Cutoff Current | I _{CBO} | - | - | -0.1 | μA | V _{CB} =-30V, I _E =0 |
| Emitter Cutoff Current | I _{EBO} | - | - | -0.1 | μA | V _{EB} =-5V, I _C =0 |
| Collector-Emitter Saturation Voltage ⁽¹⁾ | V _{CE(sat)} | - | - | -0.7 | V | I _C =-500mA, I _B =-50mA |
| Base-Emitter On Voltage ⁽¹⁾ | V _{BE(on)} | - | - | -1.2 | V | V _{CE} =-1V, I _C =-300mA |
| DC Current Gain ⁽¹⁾ | hFE1 | 100 | - | 630 | - | I _C =-100mA, V _{CE} =-1V |
| | hFE2 | 40 | - | - | - | I _C =-300mA, V _{CE} =-1V |
| Transition Frequency | f _T | - | 100 | - | MHz | I _C =-10mA, V _{CE} =-5V, f=100MHz |
| Output Capacitance | C _{ob} | - | 4 | - | pF | V _{CB} =-10V, f=1MHz, I _C =0 |

(1) Pulse Test: Pulse Width ≤ 380μs, Duty Cycle ≤ 2%

Classification of hFE1

| Rank | 16 | 25 | 40 |
|-------|---------|---------|---------|
| Range | 100~250 | 160~400 | 250~630 |