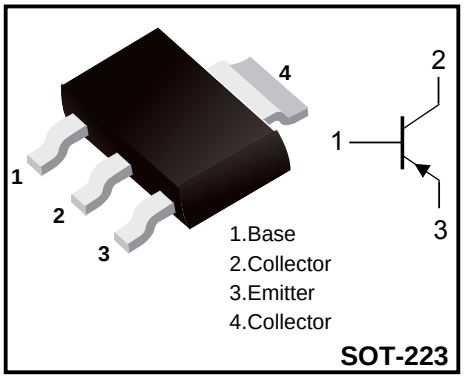
## PNP Plastic-Encapsulate Transistors




### FEATURES

- High breakdown Voltage
- High DC Current Gain
- Complement to PZTA44

| Marking Code | |
|---|---|
| PZTA94 | YFW PZTA94 |

### Absolute Maximum Rating (TC=25℃, unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Collector-base voltage | $BV_{CBO}$ | -400 | V |
| Collector-emitter voltage | $BV_{CEO}$ | -400 | V |
| Emitter-base voltage | $BV_{EBO}$ | -6 | V |
| Collector current | $I_C$ | -300 | mA |
| Collector power dissipation | $P_C$ | 625 | mW |
| Junction temperature | $T_j$ | 150 | ℃ |
| Storage temperature | $T_{stg}$ | -55～150 | ℃ |

### Electrical Characteristics ($T_C$=25℃, unless otherwise noted)

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector-base breakdown voltage | $I_C$ = -100μA , $I_E$ = 0 | $BV_{CBO}$ | -400 | | | V |
| Collector-emitter breakdown voltage | $I_C$ = -1mA , $I_B$ = 0 | $BV_{CEO}$ | -400 | | | V |
| Emitter-base breakdown voltage | $I_E$ = -100μA , $I_C$ = 0 | $BV_{EBO}$ | -6 | | | V |
| Collector cut-off current | $V_{CB}$ = -300V , $I_B$ = 0 | $I_{CEO}$ | | | -100 | nA |
| Emitter cut-off current | $V_{EB}$ = -4V , $I_C$ = 0 | $I_{EBO}$ | | | -100 | nA |
| DC current gain | $V_{CE}$ = -10V , $I_C$= -1mA<br>$V_{CE}$ = -10V , $I_C$= -10mA<br>$V_{CE}$ = -10V , $I_C$= -50mA<br>$V_{CE}$ = -10V , $I_C$= -100mA | $h_{FE}$ | 60<br>60<br>70<br>40 | | 300 | |
| Collector-emitter saturation voltage | $I_C$ = -10mA , $I_B$ = -1mA<br>$I_C$ = -50mA , $I_B$ = -5mA | $V_{CE(sat)}$ | | | -0.2<br>-0.5 | V |
| Base-emitter saturation voltage | $I_C$ = -10mA , $I_B$ = -1mA | $V_{BE(sat)}$ | | | -0.75 | V |
| Output capacitance | $V_{CB}$ = -20V, $I_E$ = 0,f=1MHz | $C_{ob}$ | | | 7 | pF |

## Typical Characteristics

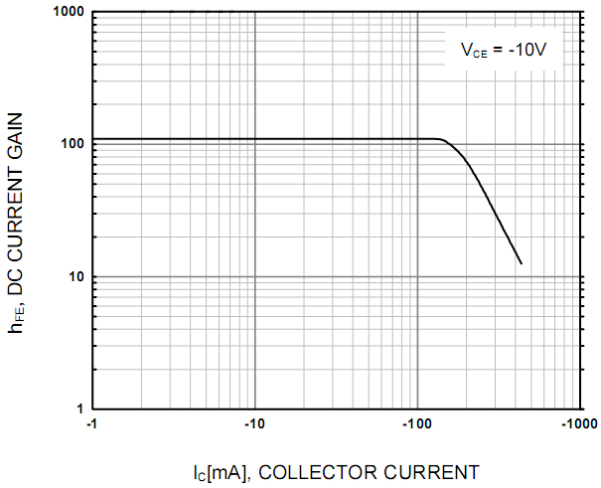



**Figure 1. DC current Gain**

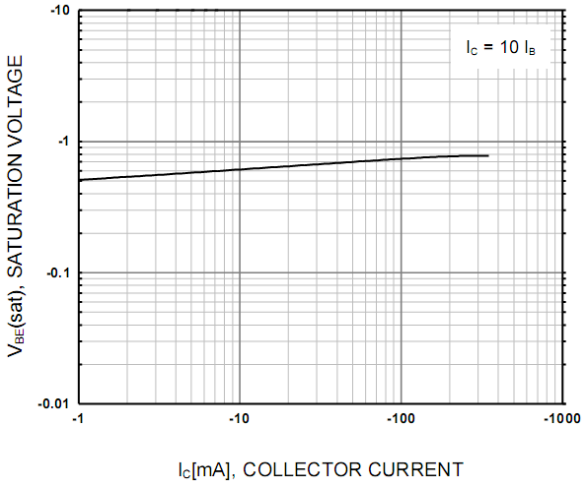



**Figure 2. Base-Emitter Saturation Voltage**

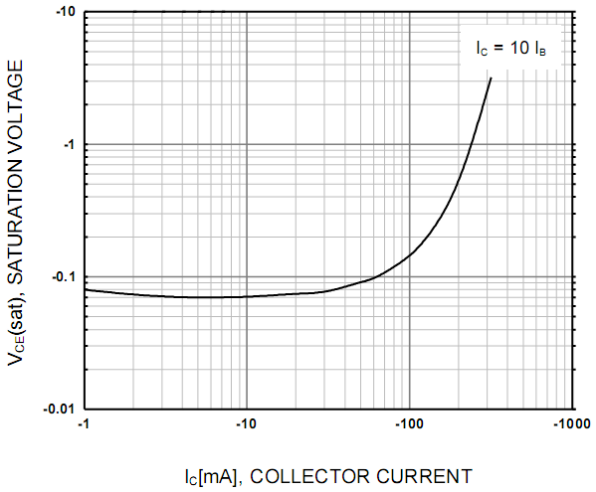



**Figure 3. Collector-Emitter Saturation Voltage**

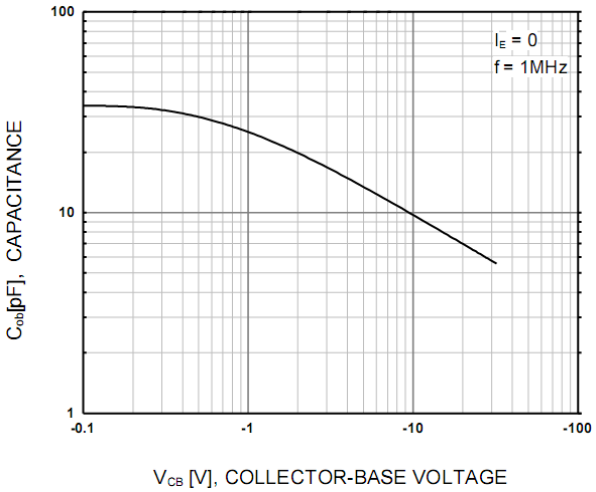


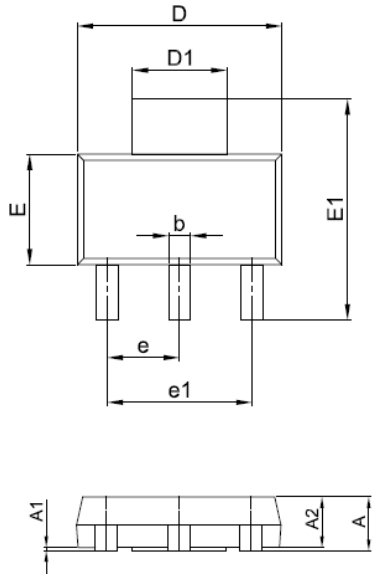

**Figure 4. Collector Output Capacitance**

## Ordering information

| Package | Packing Description | Base Quantity | Packing Quantity |
|---|---|---|---|
| SOT-223 | Tape/Reel,7”reel | 1000pcs/Reel | 6000PCS/Box 30000PCS/Carton |
| | Tape/Reel,13”reel | 2500pcs/Reel | 5000PCS/Box 30000PCS/Carton |

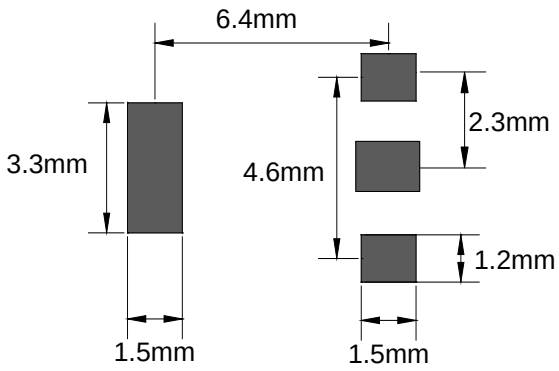
## Package Dimensions

**SOT-223**




| Dim | Millimeter | | Inches | |
|---|---|---|---|---|
| | Min. | Max. | Min. | Max. |
| A | 1.50 | 1.80 | 0.059 | 0.071 |
| A1 | 0.00 | 0.10 | 0.000 | 0.004 |
| A2 | 1.50 | 1.70 | 0.059 | 0.067 |
| b | 0.65 | 0.75 | 0.026 | 0.030 |
| c | 0.20 | 0.30 | 0.008 | 0.012 |
| D | 6.40 | 6.60 | 0.252 | 0.260 |
| D1 | 2.90 | 3.10 | 0.114 | 0.122 |
| E | 3.30 | 3.70 | 0.130 | 0.146 |
| E1 | 6.85 | 7.15 | 0.270 | 0.281 |
| e | 2.20 | 2.40 | 0.087 | 0.094 |
| e1 | 4.40 | 4.80 | 0.173 | 0.189 |
| L | 1.65 | 1.85 | 0.065 | 0.073 |
| L1 | 0.90 | 1.15 | 0.035 | 0.045 |

## The recommended mounting pad size



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