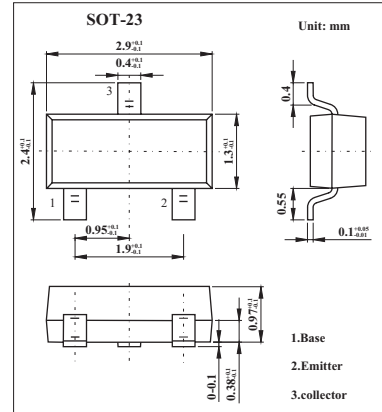


PNP Epitaxial Planar Silicon Transistors

2SB1295

■ Features

- Large current capacity.
- Low collector to emitter saturation voltage.
- Very small-sized package permitting sets to be made smaller and slimer.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---------------------------|-----------|-------------|------------------|
| Collector-base voltage | V_{CB0} | -15 | V |
| Collector-emitter voltage | V_{CEO} | -15 | V |
| Emitter-base voltage | V_{EBO} | -5 | V |
| Collector current | I_C | -0.8 | A |
| Collector current (pulse) | I_{CP} | -3 | A |
| Collector dissipation | P_C | 200 | mW |
| Jumction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Testconditons | Min | Typ | Max | Unit |
|--|---------------|-------------------------------|-----|------|------|------|
| Collector cutoff current | I_{CBO} | $V_{CB} = -12V, I_E = 0$ | | | -100 | nA |
| Emitter cutoff current | I_{EBO} | $V_{EB} = -4V, I_C = 0$ | | | -100 | nA |
| DC current Gain | h_{FE} | $V_{CE} = -2V, I_C = -50mA$ | 135 | | 600 | |
| Gain bandwidth product | f_T | $V_{CE} = -2V, I_C = -50mA$ | | 300 | | MHz |
| Output capacitance | C_{ob} | $V_{CB} = -10V, f = 1MHz$ | | 15 | | pF |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -5mA, I_B = -0.5mA$ | | -10 | -25 | mV |
| | $V_{CE(sat)}$ | $I_C = -400mA, I_B = -20mA$ | | -100 | -200 | mV |
| Base-to-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -400mA, I_B = -20mA$ | | -0.9 | -1.2 | V |
| Collector-to-base breakdown voltage | $V_{(BR)CBO}$ | $I_C = -10\mu A, I_E = 0$ | -15 | | | V |
| Collector-to-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = -1mA, R_{BE} = \infty$ | -15 | | | V |
| Emitter-to-base breakdown voltage | $V_{(BR)EBO}$ | $I_E = -10\mu A, I_C = 0$ | -5 | | | V |

■ hFE Classification

| Marking | UL | | |
|---------|---------|---------|---------|
| Rank | 5 | 6 | 7 |
| hFE | 135~270 | 200~400 | 300~600 |