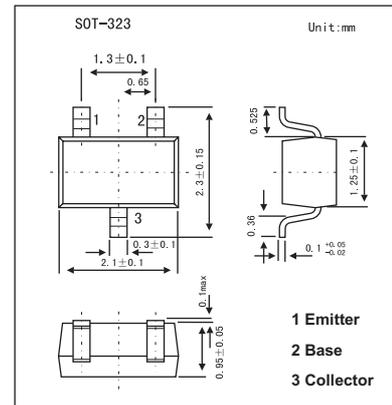


Silicon PNP Epitaxial

2SA1587

■ Features

- High voltage $V_{CE0}=-120V$
- High hFE $h_{FE}=200$ to 700
- Low noise
- Small package

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

| Parameter | Symbol | Rating | Unit |
|-----------------------------|-----------|-------------|------------|
| Collector-base voltage | V_{CB0} | -120 | V |
| Emitter-base voltage | V_{EB0} | -120 | V |
| Collector-emitter voltage | V_{CE0} | -5 | V |
| Collector current | I_C | -100 | mA |
| Base current | I_B | -20 | mA |
| Collector power dissipation | P_C | 100 | mW |
| Junction temperature | T_j | 125 | $^\circ C$ |
| Storage temperature range | T_{stg} | -55 to +125 | $^\circ C$ |

■ Electrical Characteristics $T_a = 25^\circ C$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-----|-----|------|---------|
| Collector cut-off current | I_{CBO} | $V_{CB} = -120 V, I_E = 0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -5 V, I_C = 0$ | | | -0.1 | μA |
| DC current gain | hFE | $V_{CE} = -6 V, I_C = -2 mA$ | 200 | | 700 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -10 mA, I_B = -1 mA$ | | | 0.3 | V |
| Transition frequency | f_T | $V_{CE} = -6 V, I_E = 1 mA$ | | 100 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB} = -10 V, I_E = 0, f = 1 MHz$ | | 4 | | pF |
| Noise figure | NF | $V_{CE}=-6 V, I_C=-0.1 mA, f=1 kHz, R_g=10K\Omega$ | | 1.0 | 10 | dB |

■ hFE Classification

| | | |
|---------|---------|---------|
| Marking | CG | CL |
| Rank | GR | BL |
| hFE | 200~400 | 350~700 |