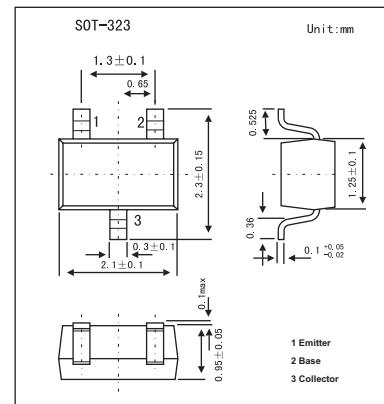


2SA1586

■ Features

- High voltage and high current.
- Excellent hFE linearity.
- High hFE.
- Low noise.
- Small package.



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|-----------------------------|------------------|-------------|------|
| Collector-base voltage | V _{CBO} | -50 | V |
| Collector-emitter voltage | V _{CEO} | -50 | V |
| Emitter-base voltage | V _{EBO} | -5 | V |
| Collector current | I _C | -150 | mA |
| Base current | I _B | -30 | mA |
| Collector power dissipation | P _C | 100 | mW |
| Junction temperature | T _j | 125 | °C |
| Storage temperature range | T _{stg} | -55 to +125 | °C |

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | | Min | Typ | Max | Unit |
|--------------------------------------|-----------------------|--|-----|------|------|------|
| Collector cut-off current | I _{CBO} | V _{CB} =-50V, I _E =0 | | | -0.1 | µA |
| Emitter cut-off current | I _{EBO} | V _{EB} =-5V, I _C =0 | | | -0.1 | µA |
| DC current gain | h _{FE} | V _{CE} =-6V, I _C =-2mA | 70 | 400 | | |
| Collector-emitter saturation voltage | V _{CE} (sat) | I _C =-100mA, I _B =-10mA | | -0.1 | -0.3 | V |
| Transition frequency | f _T | V _{CE} =-10V, I _C =-1mA | 80 | | | MHz |
| Collector output capacitance | C _{ob} | V _{CB} =-10V, I _E =0, f=1MHz | | 4 | 7 | pF |
| Noise figure | NF | V _{CE} =-6V, I _C =-0.1mA, f=1kHz, R _g =10kΩ | | 1.0 | 10 | dB |

■ hFE Classification

| Marking | SO | SY | SG |
|---------|--------|---------|---------|
| hFE | 70~140 | 120~240 | 200~400 |