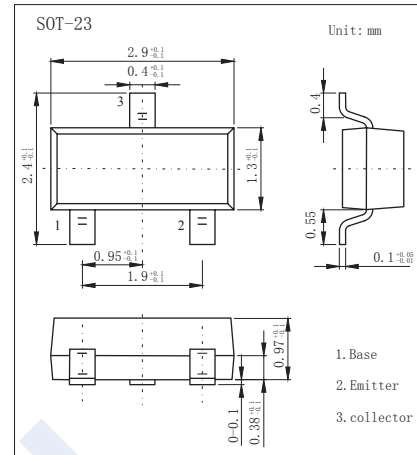


PNP Transistors

2SA1182



■ Features

- Collector Current Capability $I_C = -0.5A$
- Collector Emitter Voltage $V_{CE0} = -32V$
- Complementary to 2SC2859.

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

| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|------------|------------|
| Collector - Base Voltage | V_{CB0} | -40 | V |
| Collector - Emitter Voltage | V_{CE0} | -32 | |
| Emitter - Base Voltage | V_{EB0} | -5 | |
| Collector Current - Continuous | I_C | -500 | mA |
| Base Current - Continuous | I_B | -50 | |
| Collector Power Dissipation | P_C | 150 | mW |
| Junction Temperature | T_J | 125 | $^\circ C$ |
| Storage Temperature range | T_{stg} | -55 to 125 | |

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

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|-----------------------------------|-----|------|-------|------|
| Collector- base breakdown voltage | V_{CB0} | $I_C = -100 \mu A, I_E = 0$ | -40 | | | V |
| Collector- emitter breakdown voltage | V_{CE0} | $I_C = -1 mA, I_B = 0$ | -32 | | | |
| Emitter - base breakdown voltage | V_{EB0} | $I_E = -100 \mu A, I_C = 0$ | -5 | | | |
| Collector-base cut-off current | I_{CB0} | $V_{CB} = -40 V, I_E = 0$ | | | -0.1 | uA |
| Emitter cut-off current | I_{EB0} | $V_{EB} = -5V, I_C = 0$ | | | -0.1 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -100 mA, I_B = -10mA$ | | -0.1 | -0.25 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -100 mA, I_B = -10mA$ | | | -1.2 | |
| Base-emitter voltage | V_{BE} | $V_{CE} = -1V, I_C = -100 mA$ | | -0.8 | -1 | |
| DC current gain | $h_{FE(1)}$ | $V_{CE} = -1V, I_C = -100mA$ | 70 | | 400 | |
| | $h_{FE(2)}$ | $V_{CE} = -6V, I_C = -400mA$ *1 | 25 | | 25 | |
| Collector output capacitance | C_{ob} | $V_{CB} = -6V, I_E = 0, f = 1MHz$ | | 13 | | pF |
| Transition frequency | f_T | $V_{CE} = -6V, I_C = -20mA$ | | 200 | | MHz |

*1: $h_{FE(2)}$ classification O: 25 (min), Y: 40 (min), GR: 70 (min)

■ Classification of $h_{FE(1)}$

| Marking | ZO | ZY | ZG |
|---------|--------|---------|---------|
| Rank | O | Y | GR(G) |
| Range | 70-140 | 120-240 | 200-400 |

PNP Transistors

2SA1182

■ Typical Characteristics

