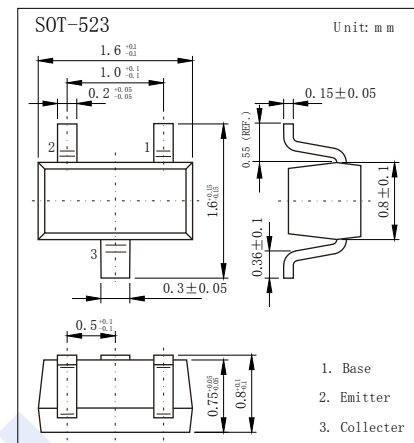


PNP Transistors

2SA1774

■ Features

- Reduces Board Space
- High h_{FE}
- Low $V_{CE(sat)}$



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

| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|------------|------------------|
| Collector - Base Voltage | V_{CBO} | -60 | V |
| Collector - Emitter Voltage | V_{CEO} | -50 | |
| Emitter - Base Voltage | V_{EBO} | -6 | |
| Collector Current - Continuous | I_C | -150 | mA |
| Collector Power Dissipation | P_C | 150 | mW |
| Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| Storage Temperature range | T_{stg} | -55 to 150 | |

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

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---------------|--|-----|-----|------|------|
| Collector- base breakdown voltage | V_{CBO} | $I_C = -50 \mu\text{A}$, $I_E = 0$ | -60 | | | V |
| Collector- emitter breakdown voltage | V_{CEO} | $I_C = -1 \text{mA}$, $I_B = 0$ | -50 | | | |
| Emitter - base breakdown voltage | V_{EBO} | $I_E = -50 \mu\text{A}$, $I_C = 0$ | -6 | | | |
| Collector-base cut-off current | I_{CBO} | $V_{CB} = -60 \text{V}$, $I_E = 0$ | | | -100 | nA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -6 \text{V}$, $I_C = 0$ | | | -100 | |
| Collector-emitter saturation voltage (Note.1) | $V_{CE(sat)}$ | $I_C = -50 \text{mA}$, $I_B = -5 \text{mA}$ | | | -0.5 | V |
| Base - emitter saturation voltage (Note.1) | $V_{BE(sat)}$ | $I_C = -50 \text{mA}$, $I_B = -5 \text{mA}$ | | | -1.2 | |
| DC current gain | h_{FE} | $V_{CE} = -6 \text{V}$, $I_C = -1 \text{mA}$ | 120 | | 560 | |
| Collector output capacitance | C_{ob} | $V_{CB} = -12 \text{V}$, $I_E = 0 \text{mA}$, $f = 1 \text{MHz}$ | | 3.5 | 5 | pF |
| Transition frequency | f_T | $V_{CE} = -12 \text{V}$, $I_C = -2 \text{mA}$, $f = 30 \text{MHz}$ | | 140 | | MHz |

■ Classification of h_{FE}

| Type | 2SA1774-Q | 2SA1774-R | 2SA1774-S |
|---------|-----------|-----------|-----------|
| Range | 120-270 | 180-390 | 270-560 |
| Marking | FQ | FR | FS |

PNP Transistors

2SA1774

Typical Characteristics

