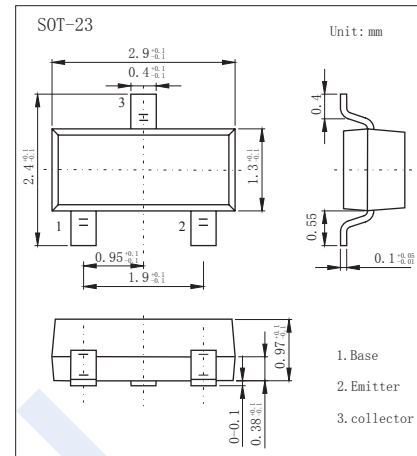


PNP Transistors

2SA1121

■ Features

- Low frequency amplifier
- Complementary pair with 2SC2618



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

| Parameter | Symbol | Rating | Unit |
|------------------------------|-----------|-------------|------------------|
| Collector to base voltage | V_{CBO} | -35 | V |
| Collector to emitter voltage | V_{CEO} | -35 | V |
| Emitter to base voltage | V_{EBO} | -4 | V |
| Collector current | I_C | -500 | mA |
| Collector power dissipation | P_C | 150 | mW |
| Junction 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 | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-----|-------|------|---------------|
| Collector- base breakdown voltage | V_{CBO} | $I_C = -100 \mu\text{A}, I_E = 0$ | -35 | | | V |
| Collector- emitter breakdown voltage | V_{CEO} | $I_C = -1 \text{ mA}, I_B = 0$ | -35 | | | |
| Emitter - base breakdown voltage | V_{EBO} | $I_E = -100 \mu\text{A}, I_C = 0$ | -4 | | | |
| Collector-base cut-off current | I_{CBO} | $V_{CB} = -30 \text{ V}, I_E = 0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -4 \text{ V}, I_C = 0$ | | | -0.1 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -150 \text{ mA}, I_B = -15 \text{ mA}$ | | -0.2 | -0.6 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -150 \text{ mA}, I_B = -15 \text{ mA}$ | | | -1.2 | |
| Base-emitter voltage | V_{BE} | $I_C = -10 \text{ mA}, V_{CE} = -3 \text{ V}$ | | -0.64 | | |
| DC current transfer ratio | h_{FE} | $I_C = -10 \text{ mA}, V_{CE} = -3 \text{ V}$ | 100 | | 320 | |
| | | $I_C = -500 \text{ mA}, V_{CE} = -3 \text{ V}$ | 10 | | | |

■ $h_{FE}(1)$ Classification

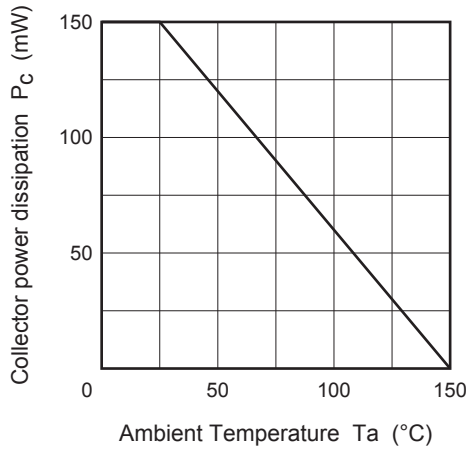
| Marking | SC | SD |
|----------|---------|---------|
| h_{FE} | 100~200 | 160~320 |

PNP Transistors

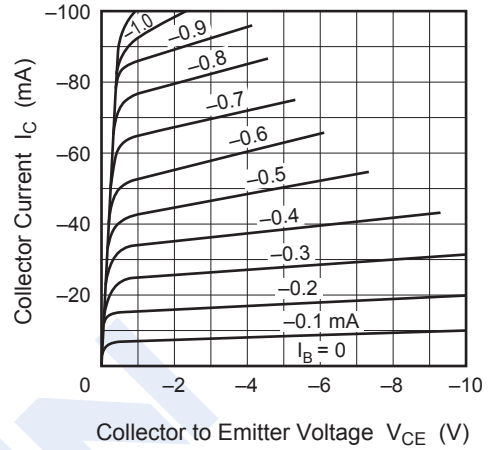
2SA1121

■ Typical Characteristics

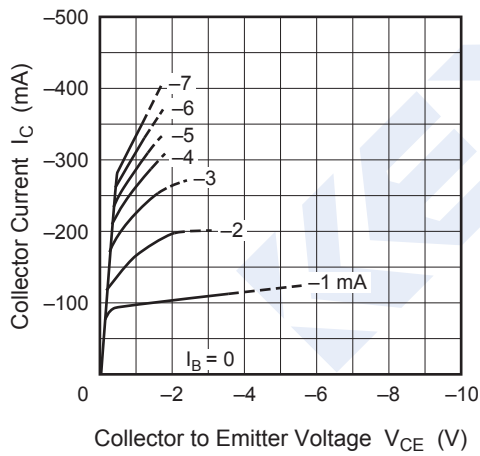
Maximum Collector Dissipation Curve



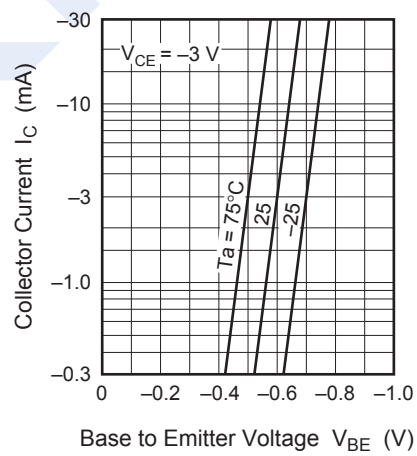
Typical Output Characteristics (1)



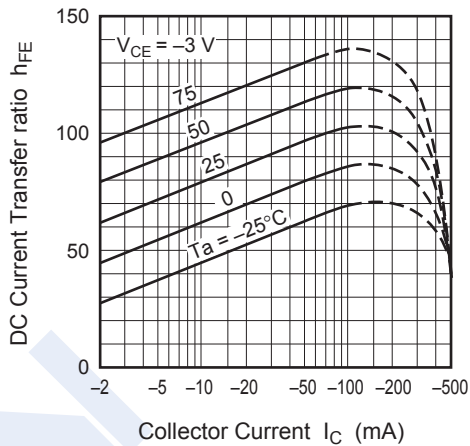
Typical Output Characteristics (2)



Typical Transfer Characteristics



DC Current Transfer Ratio vs. Collector Current



Gain Bandwidth Product vs. Collector Current

