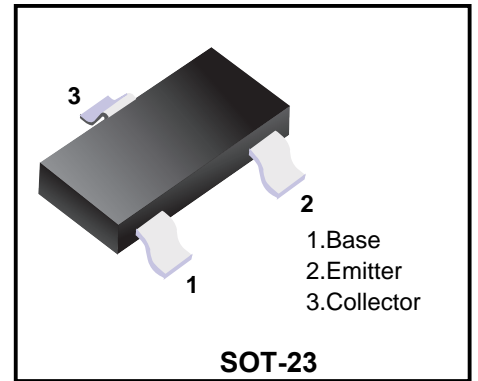


PNP Transistors



Features

- High voltage and high current
- High h_{FE} : $h_{FE} = 70\sim 400$
- Low noise: $NF = 1\text{dB (typ.)}, 10\text{dB (max)}$
- Complementary to 2SC2712

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

| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|------------|------------------|
| Collector - Base Voltage | V_{CB0} | -50 | V |
| Collector - Emitter Voltage | V_{CE0} | -50 | |
| Emitter - Base Voltage | V_{EB0} | -5 | |
| Collector Current - Continuous | I_c | -150 | mA |
| Base Current | I_B | -30 | |
| Collector Power Dissipation | P_c | 150 | mW |
| Junction Temperature | T_J | 125 | $^\circ\text{C}$ |
| Storage Temperature range | T_{stg} | -55 to 125 | |

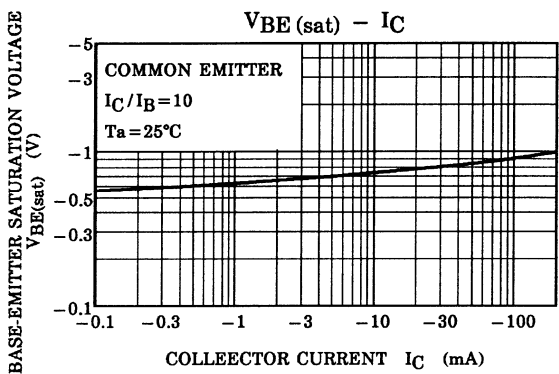
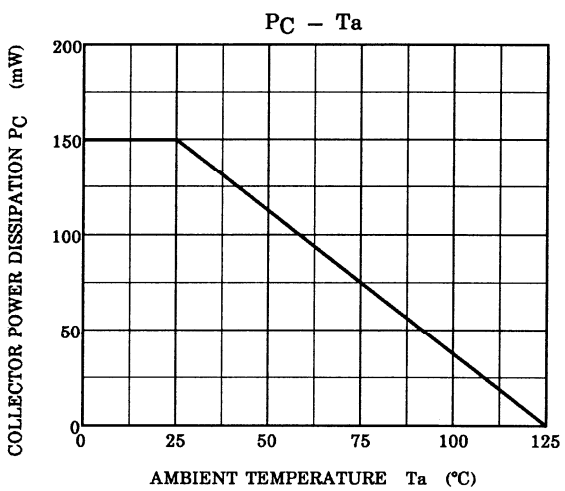
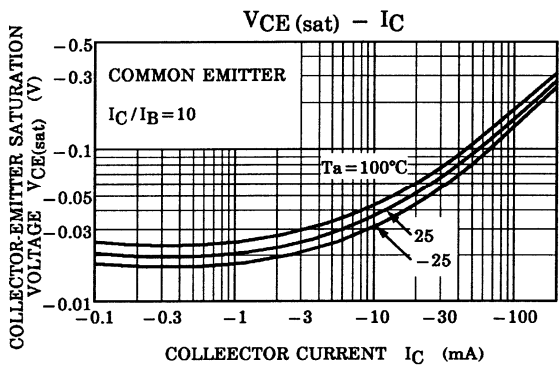
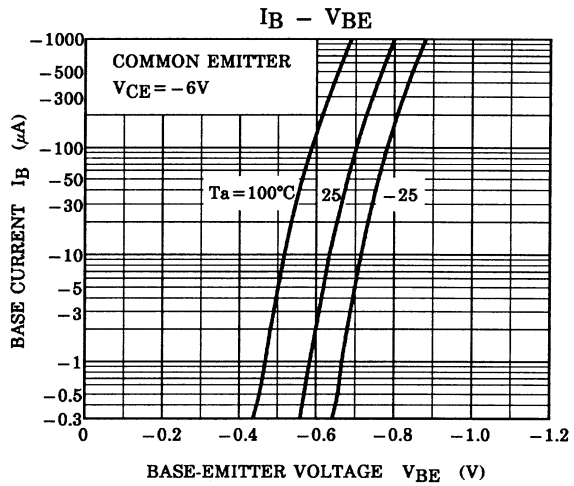
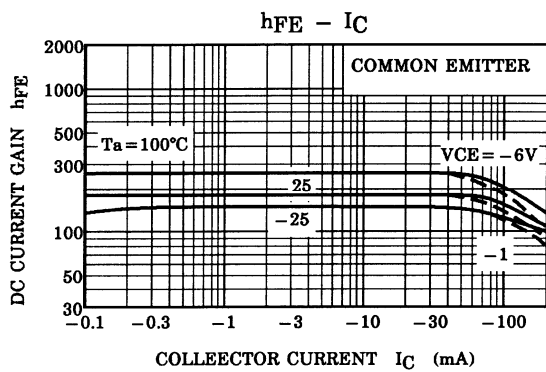
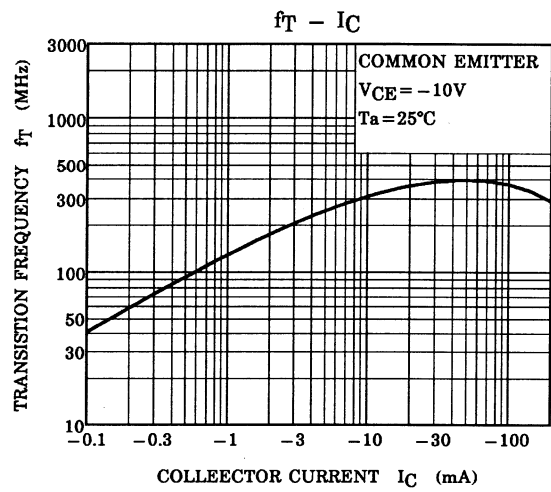
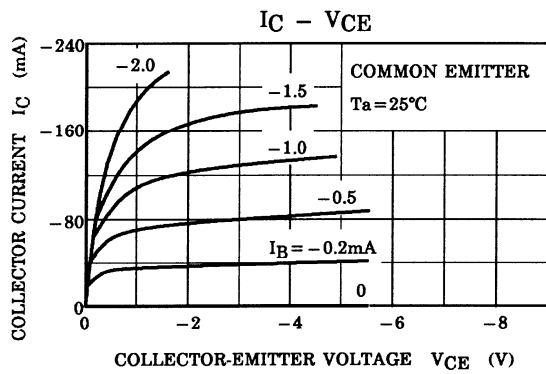
Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise specified.)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|--|-----|-----|------|------|
| Collector- base breakdown voltage | V_{CB0} | $I_c = -100\ \mu\text{A}, I_E = 0$ | -50 | | | V |
| Collector- emitter breakdown voltage | V_{CE0} | $I_c = -1\ \text{mA}, I_B = 0$ | -50 | | | |
| Emitter - base breakdown voltage | V_{EB0} | $I_E = -100\ \mu\text{A}, I_c = 0$ | -5 | | | |
| Collector-base cut-off current | I_{CB0} | $V_{CB} = -50\ \text{V}, I_E = 0$ | | | -100 | nA |
| Emitter cut-off current | I_{EB0} | $V_{EB} = -5\ \text{V}, I_c = 0$ | | | -100 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_c = -100\ \text{mA}, I_B = -10\ \text{mA}$ | | | -0.3 | V |
| Base - emitter saturation voltage | $V_{BE(sat)}$ | $I_c = -100\ \text{mA}, I_B = -10\ \text{mA}$ | | | -1.2 | |
| DC current gain | h_{FE} | $V_{CE} = -6\ \text{V}, I_c = -2\ \text{mA}$ | 70 | | 400 | |
| Noise figure | NF | $V_{CE} = -6\ \text{V}, I_c = -0.1\ \text{mA}, f = 1\ \text{kHz}, R_g = 10\ \text{k}\Omega,$ | | | 10 | dB |
| Collector output capacitance | C_{ob} | $V_{CB} = -10\ \text{V}, I_E = 0, f = 1\ \text{MHz}$ | | | 7 | pF |
| Transition frequency | f_T | $V_{CE} = -10\ \text{V}, I_c = -1\ \text{mA}$ | 80 | | | MHz |

h_{FE} Classification

| Type | 2SA1162-O | 2SA1162-Y | 2SA1162-G |
|---------|-----------|-----------|-----------|
| Range | 70-140 | 120-240 | 200-400 |
| Marking | SO | SY | SG |

Typical Characteristics



Ordering information

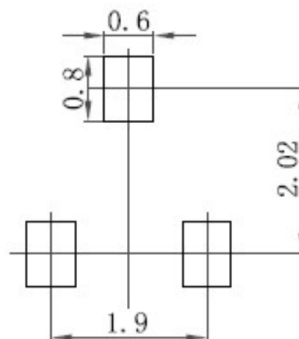
| Package | Packing Description | Base Quantity | Packing Quantity |
|---------|---------------------|---------------|-------------------------------|
| SOT-23 | Tape/Reel, 7" reel | 3000pcs/Reel | 24000PCS/Box 120000PCS/Carton |

Package Dimensions

SOT-23

| Dim. | Millimeter (mm) | | mil | |
|------|-----------------|------|------|------|
| | Min. | Max. | Min. | Max. |
| A | 0.9 | 1.15 | 35 | 45 |
| A1 | 0.1 | | 3.9 | |
| bp | 0.38 | 0.48 | 15 | 19 |
| C | 0.09 | 0.15 | 3.54 | 5.9 |
| D | 2.8 | 3.0 | 110 | 118 |
| E | 1.2 | 1.4 | 47 | 55 |
| E | 1.9 | | 75 | |
| E1 | 0.95 | | 37 | |
| HE | 2.1 | 2.55 | 83 | 100 |
| Lp | 0.15 | 0.45 | 5.9 | 18 |
| Q | 0.45 | 0.55 | 18 | 22 |
| v | 0.2 | | 7.9 | |
| W | 0.1 | | 4 | |

The recommended mounting pad size



Disclaimer

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