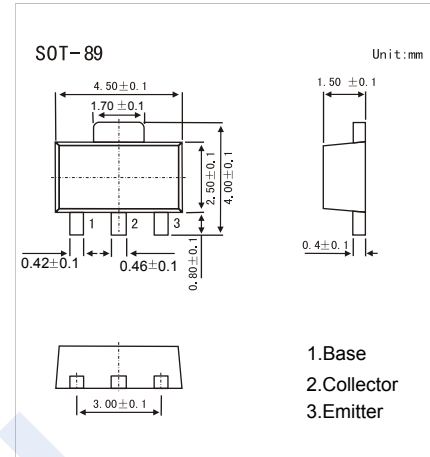
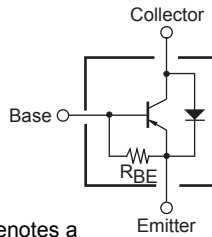


PNP Transistors

2SB1325-HF

■ Features

- Contains diode between collector and emitter.
- Low saturation voltage.
- Large current capacity.
- Complementary to 2SD1999-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



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

| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|------------|------------------|
| Collector - Base Voltage | V_{CB0} | -25 | V |
| Collector - Emitter Voltage | V_{CE0} | -20 | |
| Emitter - Base Voltage | V_{EB0} | -6 | |
| Collector Current - Continuous | I_C | -4 | A |
| Collector Current - Pulse | I_{CP} | -6 | |
| Collector Power Dissipation | P_C | 1.5 | W |
| 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_{CB0} | $I_C = -100 \mu\text{A}$, $I_E = 0$ | -25 | | | V |
| Collector- emitter breakdown voltage | V_{CE0} | $I_C = -10 \text{ mA}$, $R_{BE} = \infty$ | -20 | | | |
| Emitter - base breakdown voltage | V_{EB0} | $I_E = -100 \mu\text{A}$, $I_C = 0$ | -6 | | | |
| Collector-base cut-off current | I_{CB0} | $V_{CB} = -20 \text{ V}$, $I_E = 0$ | | | -1 | μA |
| Emitter cut-off current | I_{EB0} | $V_{EB} = -5 \text{ V}$, $I_C = 0$ | | | -0.1 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -3 \text{ A}$, $I_B = -150 \text{ mA}$ | | -0.25 | -0.5 | V |
| Base - emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -3 \text{ A}$, $I_B = -150 \text{ mA}$ | | | -1.5 | |
| DC current gain | $h_{FE(1)}$ | $V_{CE} = -2 \text{ V}$, $I_C = -500 \text{ mA}$ | 70 | | | |
| | $h_{FE(2)}$ | $V_{CE} = -2 \text{ V}$, $I_C = -3 \text{ A}$ | 50 | | | |
| Base-to-Emitter Resistance | R_{BE} | | | 1.5 | | $\text{k}\Omega$ |
| Diode Forward Voltage | V_F | $I_F = 500 \text{ mA}$ | | | 1.5 | V |
| Collector output capacitance | C_{ob} | $V_{CB} = -10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$ | | 60 | | pF |
| Transition frequency | f_T | $V_{CE} = -2 \text{ V}$, $I_C = -500 \text{ mA}$ | | 300 | | MHz |

■ Marking

| | |
|---------|------|
| Marking | BM F |
|---------|------|

PNP Transistors

2SB1325-HF

■ Typical Characteristics

