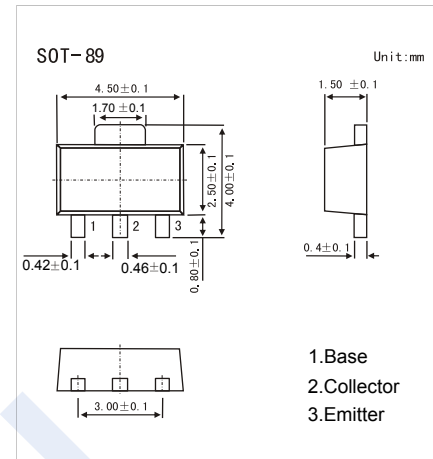


PNP Transistors

2SB767-HF

■ Features

- Large collector power dissipation P_c
- High collector to emitter voltage V_{CEO} .
- Complimentary to 2SD875-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} | -80 | V |
| Collector - Emitter Voltage | V_{CE0} | -80 | |
| Emitter - Base Voltage | V_{EB0} | -5 | |
| Collector Current - Continuous | I_c | -0.5 | A |
| Collector Current - Pulse | I_{cP} | -1 | |
| Collector Power Dissipation | P_c | 1 | 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} | $I_c = -100 \mu\text{A}$, $I_E = 0$ | -80 | | | V |
| Collector- emitter breakdown voltage | V_{CE0} | $I_c = -1 \text{ mA}$, $I_B = 0$ | -80 | | | |
| Emitter - base breakdown voltage | V_{EB0} | $I_E = -100 \mu\text{A}$, $I_c = 0$ | -5 | | | |
| Collector-base cut-off current | I_{CB0} | $V_{CB} = -60 \text{ V}$, $I_E = 0$ | | | -100 | nA |
| Emitter cut-off current | I_{EB0} | $V_{EB} = -4 \text{ V}$, $I_c = 0$ | | | -100 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_c = -300 \text{ mA}$, $I_B = -30 \text{ mA}$ | | -0.2 | -0.4 | V |
| Base - emitter saturation voltage | $V_{BE(sat)}$ | $I_c = -300 \text{ mA}$, $I_B = -30 \text{ mA}$ | | -0.85 | -1.2 | |
| DC current gain | $h_{FE(1)}$ | $V_{CE} = -10 \text{ V}$, $I_c = -150 \text{ mA}$ | 90 | | 330 | |
| | $h_{FE(2)}$ | $V_{CE} = -5 \text{ V}$, $I_c = -500 \text{ mA}$ | 50 | 100 | | |
| Collector output capacitance | C_{ob} | $V_{CB} = -10 \text{ V}$, $I_E = 0$, $f = 1 \text{ MHz}$ | | 20 | 30 | pF |
| Transition frequency | f_T | $V_{CE} = -10 \text{ V}$, $I_E = 50 \text{ mA}$, $f = 200 \text{ MHz}$ | | 120 | | MHz |

■ Classification of $h_{FE(1)}$

| Type | 2SB767-Q-HF | 2SB767-R-HF | 2SB767-S-HF |
|---------|-------------|-------------|-------------|
| Range | 90-155 | 130-220 | 185-330 |
| Marking | CQ_F | CR_F | CS_F |

PNP Transistors

2SB767-HF

■ Typical Characteristics

