

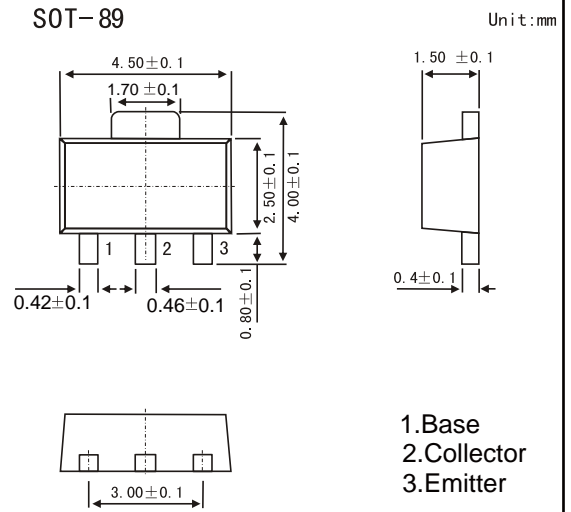
SOT-89 Plastic-Encapsulate Transistors

Features

- Low $V_{CE(sat)}$. $V_{CE(sat)} = -0.5V$ (Typ.) ($I_C/I_B = -2A / -0.2A$)
- PNP Transistor

MECHANICAL DATA

- Case style: SOT-89 -3L molded plastic
- Mounting position: any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter | Symbol | Rating | Unit |
|-----------------------------|------------|-------------|------|
| Collector-base Voltage | V_{CB0} | -40 | V |
| Collector-emitter Voltage | V_{CE0} | -32 | V |
| Emitter-base Voltage | V_{EB0} | -5 | V |
| Collector current | I_C | -2 | A |
| | I_{CP}^* | -3 | A |
| Collector power dissipation | P_C | 0.5 | W |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55 to +150 | °C |

* $PW=100ms$

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|---------------------------------------|-----|------|------|---------|
| Collector-base breakdown voltage | BV_{CB0} | $I_C = -50 \mu A$ | -40 | | | V |
| Collector-emitter breakdown voltage | BV_{CE0} | $I_C = -1mA$ | -32 | | | V |
| Emitter-base breakdown voltage | BV_{EB0} | $I_E = -50 \mu A$ | -5 | | | V |
| Collector cutoff current | I_{CBO} | $V_{CB} = -20V$ | | | -1 | μA |
| Emitter cutoff current | I_{EBO} | $V_{EB} = -4V$ | | | -1 | μA |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -2A, I_B = -0.2A$ | | -0.5 | -0.8 | V |
| DC current transfer ratio | h_{FE} | $V_{CE} = -3V, I_C = -0.5A$ | 82 | | 390 | |
| Output Capacitance | C_{ob} | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | | 50 | | pF |
| Transition frequency | f_T | $V_{CE} = -5V, I_E = 0.5A, f = 30MHz$ | | 100 | | MHz |

h_{FE} Classification

| Type | 2SB1188-P | 2SB1188-Q | 2SB1188-R |
|---------|-----------|-----------|-----------|
| Range | 82-180 | 120-270 | 180-390 |
| Marking | BCP* | BCQ* | BCR* |