

## SOT-89 Plastic-Encapsulate Transistors

### FEATURES

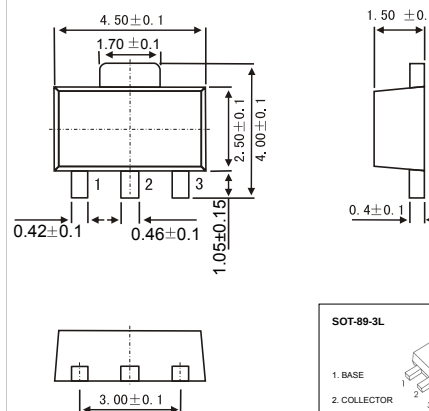
- High Breakdown Voltage
- TRANSISTOR (PNP)

### MECHANICAL DATA

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

### SOT-89-3L

Unit:mm



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Symbol    | Parameter                     | Value    | Unit |
|-----------|-------------------------------|----------|------|
| $V_{CBO}$ | Collector-Base Voltage        | -400     | V    |
| $V_{CEO}$ | Collector-Emitter Voltage     | -400     | V    |
| $V_{EBO}$ | Emitter-Base Voltage          | -5       | V    |
| $I_C$     | Collector Current -Continuous | -0.2     | A    |
| $I_{CM}$  | Collector Current- Pulsed     | -0.3     | A    |
| $P_C$     | Collector Power Dissipation   | 0.5      | W    |
| $T_J$     | Junction Temperature          | 150      | °C   |
| $T_{stg}$ | storage Temperature           | -55~+150 | °C   |

### PACKAGE INFORMATION

| Device | Package | Shipping       |
|--------|---------|----------------|
| A94    | SOT-89  | 1000/Tape&Reel |

| Parameter                            | Symbol        | Test conditions                             | Min  | Typ | Max   | Unit    |
|--------------------------------------|---------------|---------------------------------------------|------|-----|-------|---------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$ | $I_C = -100\mu A, I_E = 0$                  | -400 |     |       | V       |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_C = -1mA, I_B = 0$                       | -400 |     |       | V       |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$ | $I_E = -100\mu A, I_C = 0$                  | -5   |     |       | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB} = -400V, I_E = 0$                   |      |     | -0.1  | $\mu A$ |
| Collector cut-off current            | $I_{CEO}$     | $V_{CE} = -400V, I_B = 0$                   |      |     | -5    | $\mu A$ |
| Emitter cut-off current              | $I_{EBO}$     | $V_{EB} = -4V, I_C = 0$                     |      |     | -0.1  | $\mu A$ |
| DC current gain                      | $h_{FE(1)}$   | $V_{CE} = -10V, I_C = -10mA$                | 80   |     | 300   |         |
|                                      | $h_{FE(2)}$   | $V_{CE} = -10V, I_C = -1mA$                 | 70   |     |       |         |
|                                      | $h_{FE(3)}$   | $V_{CE} = -10V, I_C = -100mA$               | 60   |     |       |         |
|                                      | $h_{FE(4)}$   | $V_{CE} = -10V, I_C = -50mA$                | 80   |     |       |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -10mA, I_B = -1mA$                   |      |     | -0.2  | V       |
|                                      | $V_{CE(sat)}$ | $I_C = -50mA, I_B = -5mA$                   |      |     | -0.3  | V       |
| Base-emitter saturation voltage      | $V_{BE(sat)}$ | $I_C = -10mA, I_B = -1mA$                   |      |     | -0.75 | V       |
| Transition frequency                 | $f_T$         | $V_{CE} = -20V, I_C = -10mA$<br>$f = 30MHz$ | 50   |     |       | MHz     |

### Marking

|         |     |
|---------|-----|
| Marking | A94 |
|---------|-----|



# RATINGS AND CHARACTERISTIC CURVES

## ■ Typical Characteristics

