

## **TO-92L Plastic-Encapsulated Transistors**

2SA935 TRANSISTOR (PNP)

## **FEATURES**

Power dissipation

 $P_{CM}$  : 0.75 W (Tamb=25°C)

Collector current

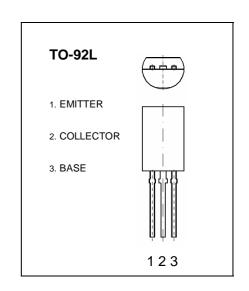
I<sub>CM</sub> : -0.7 A

Collector-base voltage

 $V_{(BR)CBO}$ : -80 V

Operating and storage junction temperature range

 $T_J$ ,  $T_{stg}$ : -55°C to +150°C



## ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

| Parameter                            | Symbol               | Test conditions                                  | MIN | TYP | MAX  | UNIT |
|--------------------------------------|----------------------|--|-----|-----|------|------|
| Collector-base breakdown voltage     | V <sub>(BR)CBO</sub> | Ic=-50μA, I <sub>E</sub> =0                      | -80 |     |      | V    |
| Collector-emitter breakdown voltage  | V <sub>(BR)CEO</sub> | Ic=-2mA, I <sub>B</sub> =0                       | -80 |     |      | V    |
| Emitter-base breakdown voltage       | V <sub>(BR)EBO</sub> | I <sub>E</sub> =-50μA, I <sub>C</sub> =0         | -5  |     |      | V    |
| Collector cut-off current            | I <sub>CBO</sub>     | V <sub>CB</sub> =-50V, I <sub>E</sub> =0         |     |     | -0.5 | μΑ   |
| Emitter cut-off current              | I <sub>EBO</sub>     | $V_{EB}$ =-4 $V$ , $I_{C}$ =0                    |     |     | -0.5 | μΑ   |
| DC current gain                      | h <sub>FE(1)</sub>   | V <sub>CE</sub> =-3V, I <sub>C</sub> =-100mA     | 82  |     | 390  |      |
| Collector-emitter saturation voltage | V <sub>CE(sat)</sub> | $I_C$ =-500mA, $I_B$ =-50mA                      |     |     | -0.4 | ٧    |
| Transition frequency                 | f⊤                   | V <sub>CE</sub> =-10V, I <sub>C</sub> =-50mA     |     | 100 |      | MHz  |
| Collector output capacitance         | C <sub>ob</sub>      | V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz |     |     | 20   | pF   |

## CLASSIFICATION OF h<sub>FE(1)</sub>

| Rank    | Р      | Q       | R       |
|---------|--------|---------|---------|
| Range   | 82-180 | 120-270 | 180-390 |
| Marking |        |         |         |