

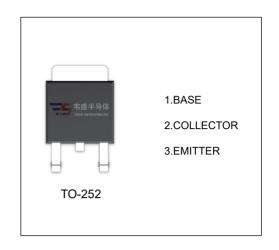
### MJD127 TRANSISTOR (PNP)

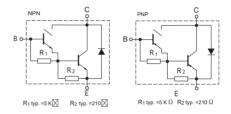
#### **FEATURES**

- High DC Current Gain
- Electrically Similar to Popular TIP127
- Built-in a Damper Diode at E-C

#### MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

| Symbol                           | Parameter  | Value   | Unit |  |
|----------------------------------|--|---------|------|--|
| V <sub>CBO</sub>                 | Collector-Base Voltage                           | -100    | V    |  |
| V <sub>CEO</sub>                 | Collector-Emitter Voltage                        | -100    | V    |  |
| V <sub>EBO</sub>                 | Emitter-Base Voltage                             | -5      | V    |  |
| Ic                               | Collector Current -Continuous                    | -8      | А    |  |
| Pc                               | Collector Power Dissipation                      | 1.5     | W    |  |
| T <sub>J</sub> ,T <sub>stg</sub> | Operation Junction and Storage Temperature Range | -55-150 | ℃    |  |





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

| Parameter                            | Symbol                  | Test conditions                                  | Min  | Тур | Max   | Unit |
|--------------------------------------|-------------------------|--|------|-----|-------|------|
| Collector-base breakdown voltage     | V <sub>(BR)CBO</sub>    | I <sub>C</sub> =-1mA,I <sub>E</sub> =0           | -100 |     |       | V    |
| Collector-emitter breakdown voltage  | V <sub>(BR)CEO</sub>    | I <sub>C</sub> =-30mA,I <sub>B</sub> =0          | -100 |     |       | V    |
| Emitter-base breakdown voltage       | V <sub>(BR)EBO</sub>    | I <sub>E</sub> =-10mA,I <sub>C</sub> =0          | -5   |     |       | V    |
| Collector cut-off current            | I <sub>CBO</sub>        | V <sub>CB</sub> =-100V,I <sub>E</sub> =0         |      |     | -10   | μA   |
| Collector-emitter cut-off current    | I <sub>CEO</sub>        | Vce=-50V,I <sub>B</sub> =0                       |      |     | -10   | μΑ   |
| Emitter cut-off current              | I <sub>EBO</sub>        | V <sub>EB</sub> =-5V,I <sub>C</sub> =0           |      |     | -2    | mA   |
| DC commont acin                      | h <sub>FE(1)</sub>      | V <sub>CE</sub> =-4V,I <sub>C</sub> =-4A         | 1000 |     | 12000 |      |
| DC current gain                      | h <sub>FE(2)</sub>      | V <sub>CE</sub> =-4V,I <sub>C</sub> =-8A         | 100  |     |       |      |
| Callantar amittar actumation valtage | V <sub>CE(sat) 1*</sub> | I <sub>C</sub> =-4A,I <sub>B</sub> =-16mA        |      |     | -2    | V    |
| Collector-emitter saturation voltage | V <sub>CE(sat) 2*</sub> | I <sub>C</sub> =-8A,I <sub>B</sub> =-80mA        |      |     | -4    | V    |
| Base-emitter saturation voltage      | V <sub>BE(sat)</sub> *  | I <sub>C</sub> =-8A,I <sub>B</sub> =-80mA        |      |     | -4.5  | V    |
| Base-emitter voltage                 | V <sub>BE</sub> *       | V <sub>CE</sub> =-4V,I <sub>C</sub> =-4A         |      |     | -2.8  | V    |
| Collector output capacitance         | C <sub>ob</sub>         | V <sub>CB</sub> =-10V,I <sub>E</sub> =0,f=0.1MHz |      |     | 300   | pF   |

<sup>\*</sup>Pulse Test: Pulse Width≤380µs, Duty Cycle≤2%



# **Typical Characteristics**

## **MJD127**

