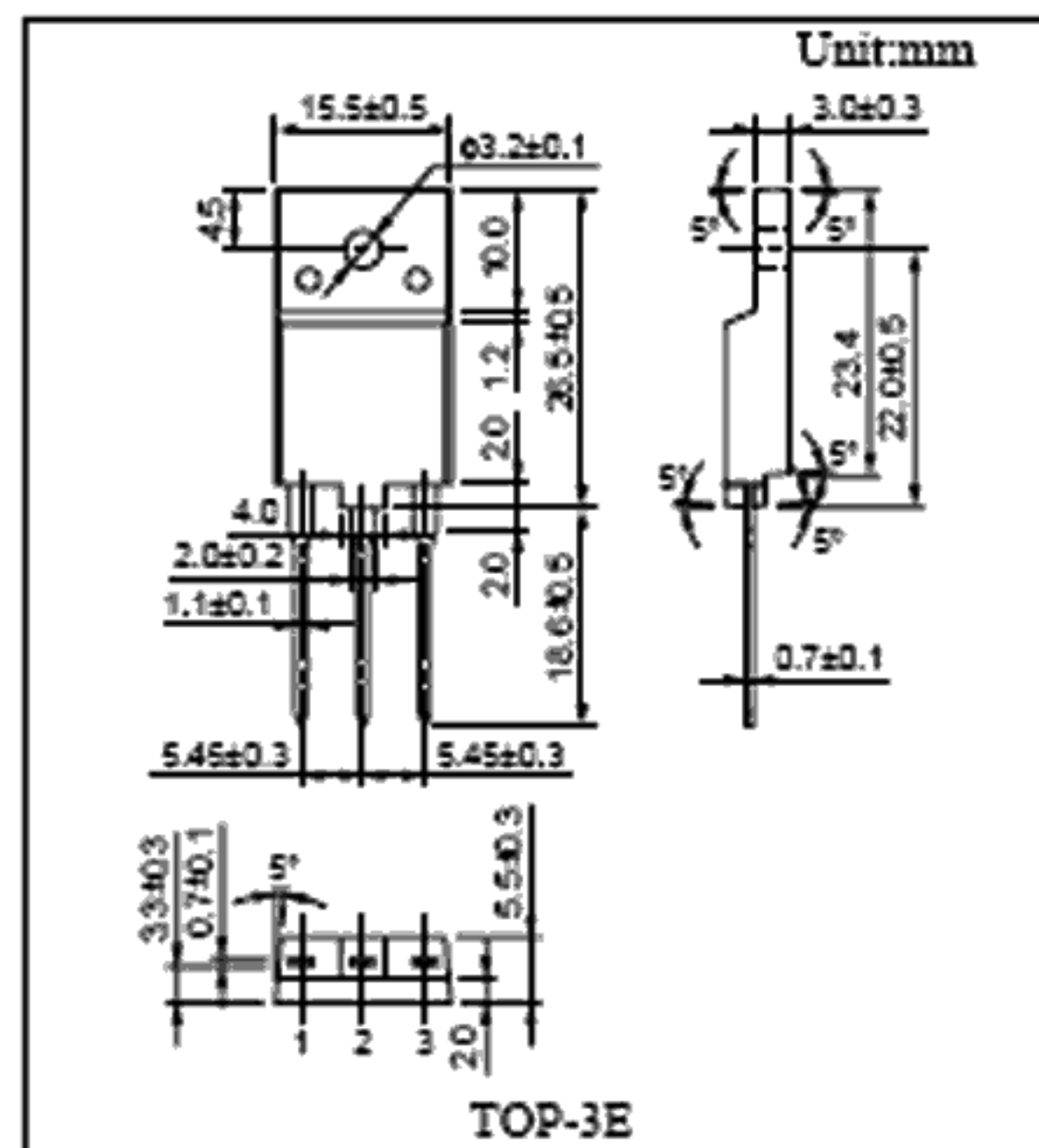


## 2SC5572

## ■ Absolute Maximum Ratings

| Parameter                    | Symbol           | Rating                              | Unit |
|------------------------------|------------------|-------------------------------------|------|
| Collector to base voltage    | V <sub>CB0</sub> | 1500                                | V    |
| Collector to emitter voltage | V <sub>CES</sub> | 1500                                | V    |
| Emitter to base voltage      | V <sub>EB0</sub> | 7                                   | V    |
| Peak collector current       | I <sub>CP</sub>  | 12 <sup>*)</sup>                    | A    |
| Collector current            | I <sub>C</sub>   | 6                                   | A    |
| Base current                 | I <sub>B</sub>   | 3                                   | A    |
| Collector power dissipation  | P <sub>C</sub>   | 40 <sup>*)</sup><br>3 <sup>*)</sup> | W    |
| Junction temperature         | T <sub>j</sub>   | 150                                 | °C   |
| Storage temperature          |                  | -55 to +150                         | °C   |



\*1)T<sub>C</sub>=25°C, \*2)T<sub>a</sub>=25°C(Without heat sink)

\*3)Non-repetitive peak collector current.

■ Electrical Characteristics(T<sub>C</sub>=25°C)

| Parameter                               | Symbol               | Conditions  | min | typ | max | Unit |
|---|----------------------|---|-----|-----|-----|------|
| Collector cutoff current                | I <sub>CBO</sub>     | V <sub>CB</sub> =1000V, I <sub>E</sub> =0                         | -   | -   | 50  | μA   |
|   | I <sub>CBO</sub>     | V <sub>CB</sub> =1500V, I <sub>E</sub> =0                         | -   | -   | 1   | mA   |
| Emitter to base voltage                 | V <sub>EB0</sub>     | I <sub>E</sub> =500mA, I <sub>C</sub> =0                          | 7   | -   | -   | V    |
| Forward current transfer ratio          | f <sub>FE</sub>      | V <sub>CE</sub> =5V, I <sub>C</sub> =4A                           | 5   | -   | 9   |      |
| Collector to emitter saturation voltage | V <sub>CE(sat)</sub> | I <sub>C</sub> =4A, I <sub>B</sub> =0.8A                          | -   | -   | 3   | V    |
| Base to emitter saturation voltage      | V <sub>BE(sat)</sub> | I <sub>C</sub> =4A, I <sub>B</sub> =0.8A                          | -   | -   | 1.5 | V    |
| Transition frequency                    | f <sub>T</sub>       | V <sub>CE</sub> =10V, I <sub>C</sub> =0.1A, f=0.5MHz              | -   | 3   | -   | MHz  |
| Storage time                            | T <sub>stg</sub>     | I <sub>C</sub> =4A, I <sub>B1</sub> =0.8A, I <sub>B2</sub> =-1.6A | -   | -   | 5.0 | μs   |
| Fall time                               | T <sub>f</sub>       | I <sub>C</sub> =4A, I <sub>B1</sub> =0.8A, I <sub>B2</sub> =-1.6A | -   | -   | 0.5 | μs   |
| Diode characteristics                   | V <sub>F</sub>       | I <sub>F</sub> =4A  | -   | -   | -2  | V    |