



## / Absolute Maximum Ratings(Ta=25 )

| Parameter                    | Symbol         | Rating    | Unit |
|------------------------------|----------------|-----------|------|
| Collector to Base Voltage    | $V_{CBO}$      | 500       | V    |
| Collector to Emitter Voltage | $V_{CEO}$      | 400       | V    |
| Emitter to Base Voltage      | $V_{EBO}$      | 6.0       | V    |
| Collector Current            | $I_C$          | 300       | mA   |
| Collector Power Dissipation  | $P_C$          | 350       | mW   |
| Collector Power Dissipation  | $P_{C(TC=25)}$ | 1.5       | W    |
| Junction Temperature         | $T_j$          | 150       |      |
| Storage Temperature Range    | $T_{stg}$      | -55 ~ 150 |      |

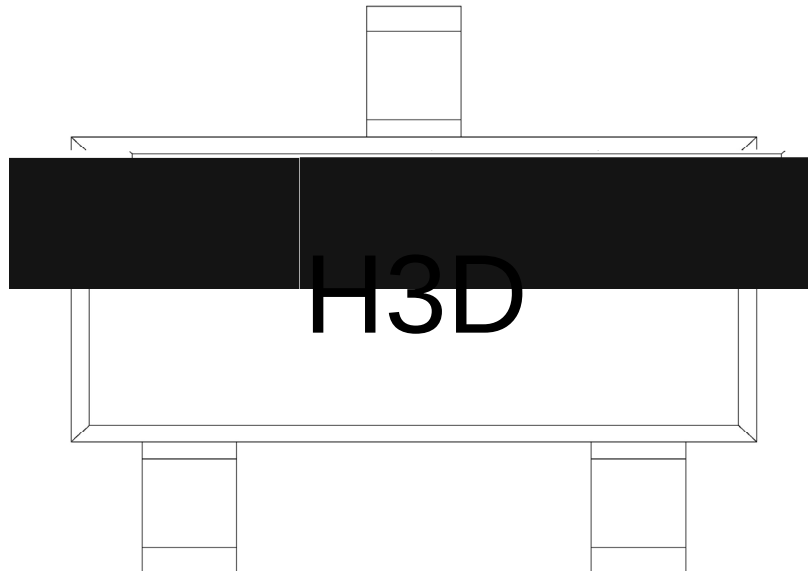
## / Electrical Characteristics(Ta=25 )

| Parameter                              | Symbol           | Test Conditions                    | Min | Typ | Max  | Unit    |
|----------------------------------------|------------------|------------------------------------|-----|-----|------|---------|
| Collector to Base Breakdown Voltage    | $V_{CBO}$        | $I_C=100\mu A$ $I_E=0$             | 500 |     |      | V       |
| Collector to Emitter Breakdown Voltage | $V_{CEO}$        | $I_C=1.0mA$ $I_B=0$                | 400 |     |      | V       |
| Emitter to Base Breakdown Voltage      | $V_{EBO}$        | $I_E=10\mu A$ $I_C=0$              | 6.0 |     |      | V       |
| Collector Cut-Off Current              | $I_{CBO}$        | $V_{CB}=400V$ $I_E=0$              |     |     | 0.1  | $\mu A$ |
| Collector Cut-Off Current              | $I_{CES}$        | $V_{CE}=400V$ $V_{BE}=0$           |     |     | 1    | $\mu A$ |
| Emitter Cut-Off Current                | $I_{EBO}$        | $V_{EB}=4.0V$ $I_C=0$              |     |     | 0.1  | $\mu A$ |
| DC Current Gain                        | $h_{FE(1)}$      | $V_{CE}=10V$ $I_C=10mA$            | 50  |     | 200  |         |
|                                        | $h_{FE(2)}$      | $V_{CE}=10V$ $I_C=100mA$           | 40  |     |      |         |
|                                        | $h_{FE(3)}$      | $V_{CE}=10V$ $I_C=50mA$            | 45  |     |      |         |
|                                        | $h_{FE(4)}$      | $V_{CE}=10V$ $I_C=1.0mA$           | 40  |     |      |         |
| Collector-Emitter Saturation Voltage   | $V_{CE(sat)(1)}$ | $I_C=1.0mA$ $I_B=0.1mA$            |     |     | 0.4  | V       |
|                                        | $V_{CE(sat)(2)}$ | $I_C=10mA$ $I_B=1.0mA$             |     |     | 0.5  | V       |
|                                        | $V_{CE(sat)(3)}$ | $I_C=50mA$ $I_B=5.0mA$             |     |     | 0.75 | V       |
| Base-Emitter Saturation Voltage        | $V_{BE(sat)}$    | $I_C=10mA$ $I_B=1.0mA$             |     |     | 0.75 | V       |
| Output Capacitance                     | $C_{ob}$         | $V_{CB}=20V$ $I_E=0$<br>$f=1.0MHz$ |     |     | 7.0  | pF      |





/ Marking Instructions



б " X

K X      № з " Гб

3D X      № з " Гб

Note:

K X      Company Code

3D X      Product Type Code

