INC6005AC1

FOR LOW FREQUENCY AMPLIFY APPLICATION SILICON NPN EPITAXIAL TYPE

DESCRIPTION

INC6005AC1 is a silicon NPN transistor.

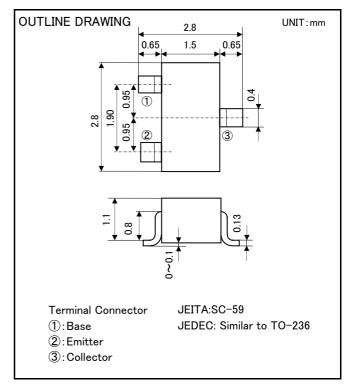
It is designed with high voltage.

FEATURE

- •Super mini package for easy mounting
- •High voltage V_{CEO}=400V

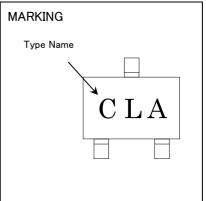
APPLICATION

DC/DC convertor, High voltage switching



MAXIMUM RATING (Ta=25°C)

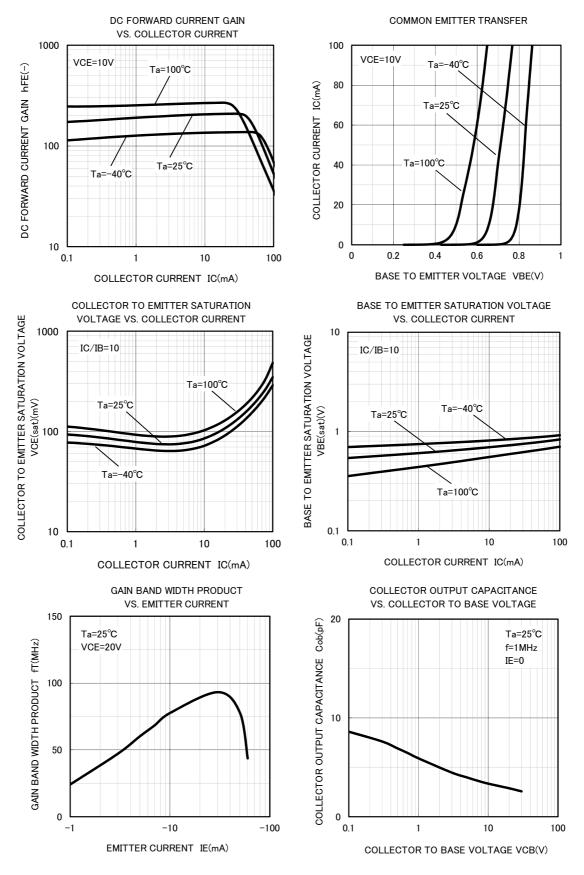
| SYMBOL | PARAMETER | RATING | UNIT |
|------------------|------------------------------------|--------|------|
| V _{CBO} | Collector to Base voltage | 400 | > |
| V_{EBO} | Emitter to Base voltage | 7 | > |
| V _{CEO} | Collector to Emitter voltage | 400 | ٧ |
| I _c | Collector current | 100 | mA |
| P _c | Collector dissipation(Ta=25°C) 200 | | mW |
| T _j | Junction temperature | +150 | လူ |
| T_{stg} | Storage temperature −55~+150 | | °C |



ELECTRICAL CHARACTERISTICS (Ta=25°C)

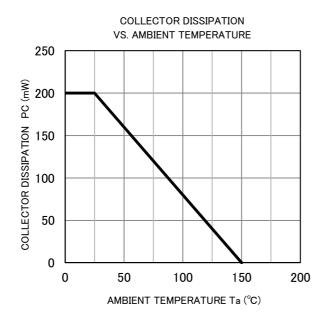
| SYMBOL | PARAMETER | TEST CONDITIONS | LIMITS | | | UNIT |
|----------------------|------------------------------|---|--------|-----|-----|------|
| | | | MIN | TYP | MAX | UNIT |
| $V_{(BR)CBO}$ | C to B break down voltage | $I_{c}=50 \mu A, I_{E}=0mA$ | 400 | _ | - | ٧ |
| $V_{(BR)EBO}$ | E to B break down voltage | $I_{E}=50 \mu A, I_{C}=0mA$ | 7 | _ | - | ٧ |
| V _{(BR)CEO} | C to E break down voltage | I _C =1mA, R _{BE} =∞ | 400 | _ | - | ٧ |
| I _{CBO} | Collector cut off current | V_{CB} =400V, I_E =0mA | - | _ | 1 | μΑ |
| \mathbf{I}_{EBO} | Emitter cut off current | V _{EB} =6V, I _C =0mA | _ | _ | 1 | μΑ |
| h _{FE} | DC forward current gain | V _{CE} =10V, I _C =1mA | 82 | _ | 280 | _ |
| $V_{CE(sat)}$ | C to E saturation voltage | I _C =10mA, I _B =1mA | - | _ | 0.5 | V |
| f _T | Gain bandwidth product | V _{CE} =20V, I _E =-10mA, f=100MHz | _ | 70 | _ | MHz |
| Cob | Collector output capacitance | V _{CB} =10V, I _E =0mA, f=1MHz | - | 3.3 | - | pF |

TYPICAL CHARACTERISTICS



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