# INC6017AM1

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

## DESCRIPTION

INC6017AM1 is a silicon NPN transistor.

It is designed with high voltage.

## FEATURE

・Small package for easy mounting.

・High voltage $V_{CEO}$ = 160V

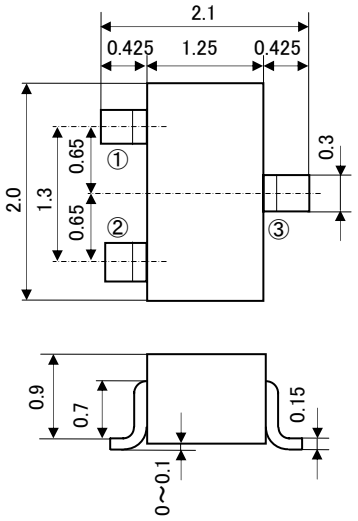
・Low voltage VCE(sat) = 0.15V(MAX)

## APPLICATION

High voltage switching.

## OUTLINE DRAWING

UNIT:mm



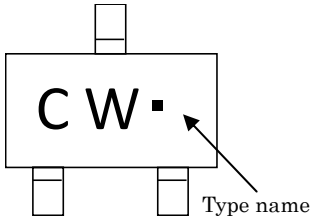

Terminal Connector
①:Base
②:Emitter
③:Collector

JEITA:SC-70
JEDEC:-

## MAXIMUM RATING(Ta=25℃)

| SYMBOL | PARAMETER | RATING | UNIT |
|---|---|---|---|
| $V_{CBO}$ | Collector to Base voltage | 180 | V |
| $V_{EBO}$ | Emitter to Base voltage | 6 | V |
| $V_{CEO}$ | Collector to Emitter voltage | 160 | V |
| $I_{CM}$ | Peak collector current | 200 | mA |
| $I_C$ | Collector current | 100 | mA |
| $P_C$ | Collector dissipation(Ta=25℃) | 200 | mW |
| $T_j$ | Junction temperature | +150 | ℃ |
| $T_{stg}$ | Storage temperature | −55～+150 | ℃ |

## MARKING

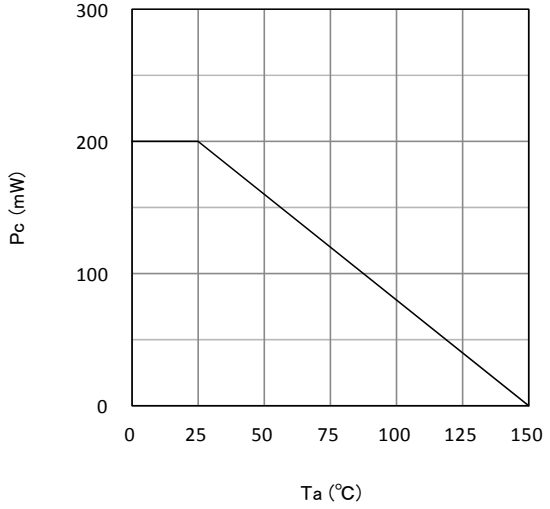



## ELECTRICAL CHARACTERISTICS(Ta=25℃)

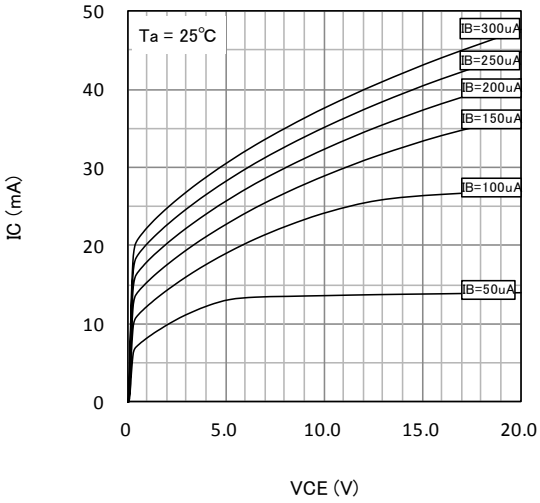
| SYMBOL | PARAMETER | TEST CONDITIONS | LIMITS | | | UNIT |
|---|---|---|---|---|---|---|
| | | | MIN | TYP | MAX | |
| $V_{(BR)CBO}$ | C to B breakdown voltage | $I_C$=100uA, $I_E$=0 | 180 | − | − | V |
| $V_{(BR)EBO}$ | E to B breakdown voltage | $I_E$=10uA, $I_C$=0 | 6 | − | − | V |
| $V_{(BR)CEO}$ | C to E breakdown voltage | $I_C$=1mA, $R_{BE}$=∞ | 160 | − | − | V |
| $I_{CBO}$ | Collector cut off current | $V_{CB}$=120V, $I_E$=0 | − | − | 100 | nA |
| $I_{EBO}$ | Emitter cut off current | $V_{EB}$=4V, $I_C$=0 | − | − | 100 | nA |
| hFE1 | DC forward current gain1 | VCE=5V, $I_C$=1mA | 150 | − | − | − |
| hFE2 | DC forward current gain2 | VCE=5V, $I_C$=10mA | 200 | − | 500 | − |
| hFE3 | DC forward current gain3 | VCE=5V, $I_C$=50mA | 27 | − | − | − |
| VCE(sat) | C to E saturation voltage | $I_C$=10mA, $I_B$=1mA | − | − | 0.15 | V |
| VBE(sat) | B to E saturation voltage | $I_C$=10mA, $I_B$=1mA | − | − | 1.0 | V |
| fT | Gain bandwidth product | VCE=10V, $I_E$=−10mA | 100 | − | 300 | MHz |
| Cob | Collector output capacitance | VCB=10V, $I_E$=0, f=1MHz | − | 1.7 | 6 | pF |

TYPICAL CHARACTERISTICS

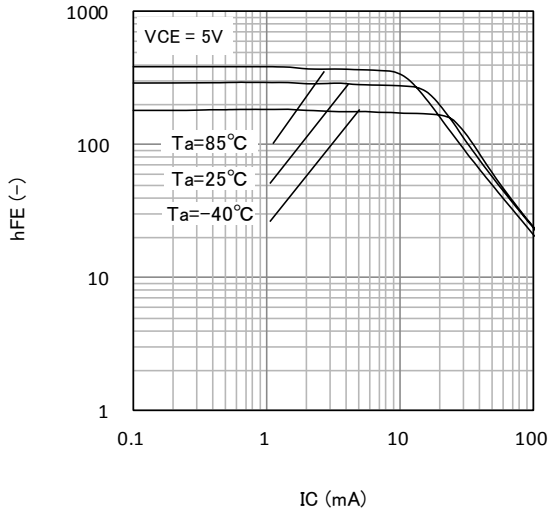
Pc – Ta



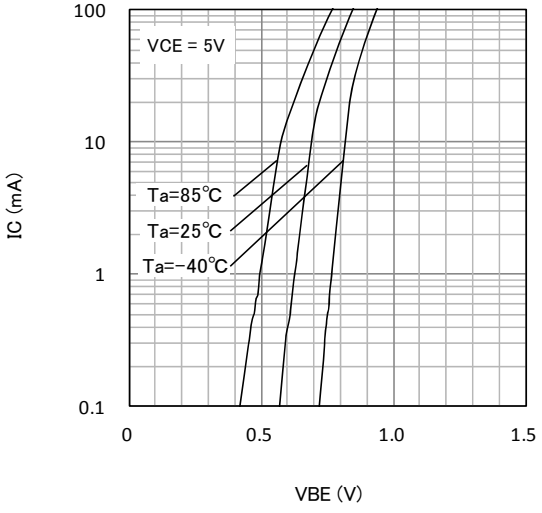

IC–VCE



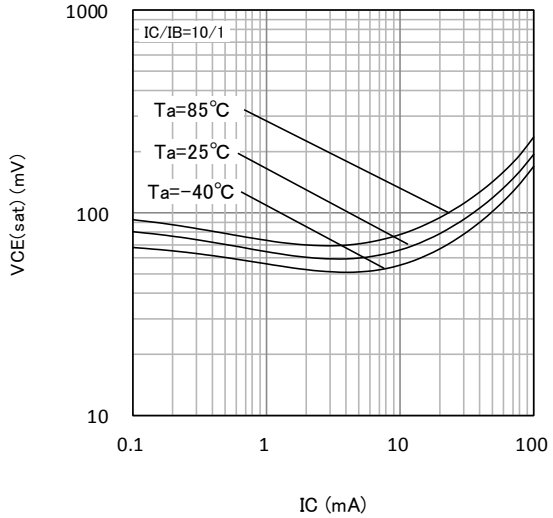

hFE–IC



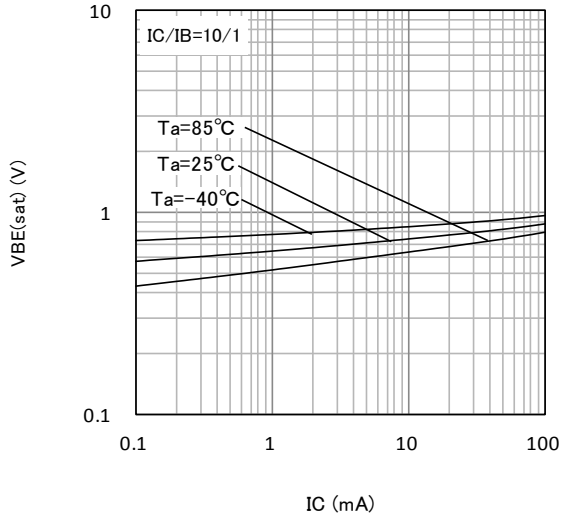

IC–VBE




VCE(sat)–IC




VBE(sat)–IC



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