<SMALL-SIGNAL TRANSISTOR>

# INA6001AP1-T150

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

AEC-Q101 Compliance

## DESCRIPTION

INA6001AP1 is a silicon PNP transistor.
It is designed with high voltage.

## FEATURE

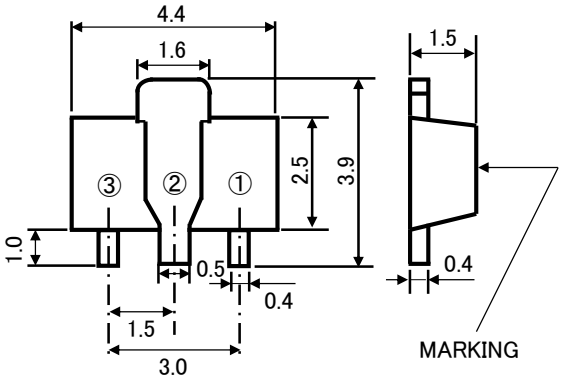
・Small package for easy mounting.
・High voltage $V_{CEO}$ = −100V
・High collector current Ic=−1A
・Low voltage VCE(sat) = −0.5V(MAX)

## APPLICATION

Relay drive, Power supply

## OUTLINE DRAWING

UNIT : mm



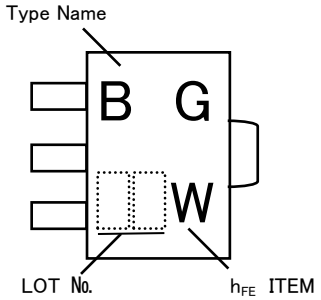

TERMINAL CONNECTOR
①: BASE
②: COLLECTOR
③: EMITTER

JEITA : SC-62
JEDEC : SOT-89

## MAXIMUM RATING (Ta=25℃)

| SYMBOL | PARAMETER | RATING | UNIT |
|---|---|---|---|
| $V_{CBO}$ | Collector to Base voltage | −120 | V |
| $V_{EBO}$ | Emitter to Base voltage | −6 | V |
| $V_{CEO}$ | Collector to Emitter voltage | −100 | V |
| $I_C$ | Collector current | −1 | A |
| $P_C$ | Collector dissipation(Ta=25℃) | 500 | 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 | $I_C$=−100μA, $I_E$=0mA | −120 | − | − | V |
| $V_{(BR)EBO}$ | E to B breakdown voltage | $I_E$=−100μA, $I_C$=0mA | −6 | − | − | V |
| $V_{(BR)CEO}$ | C to E breakdown voltage | $I_C$=−1mA, $R_{BE}$=∞ | −100 | − | − | V |
| $I_{CBO}$ | Collector cut off current | $V_{CB}$=−120V, $I_E$=0mA | − | − | −0.5 | μA |
| $I_{EBO}$ | Emitter cut off current | $V_{EB}$=−6V, $I_C$=0mA | − | − | −0.5 | μA |
| hFE | DC forward current gain | $V_{CE}$=−2V, $I_C$=−150mA | 140 | − | 330 | − |
| $V_{CE(sat)}$ | C to E saturation voltage | $I_C$=−500mA, $I_B$=−50mA | − | − | −0.5 | V |
| $V_{BE(sat)}$ | B to E saturation voltage | $I_C$=−500mA, $I_B$=−50mA | − | − | −1.1 | V |
| fT | Gain bandwidth product | $V_{CE}$=−5V, $I_E$=50mA | 100 | − | − | MHz |
| Cob | Collector output capacitance | $V_{CB}$=−10V, $I_E$=0mA, f=1MHz | − | − | 10 | pF |

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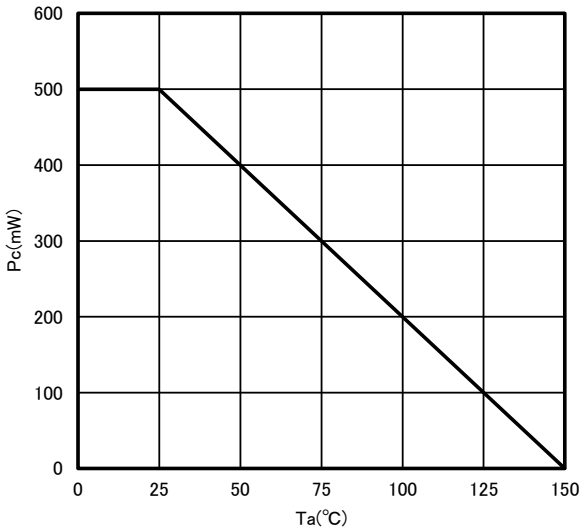
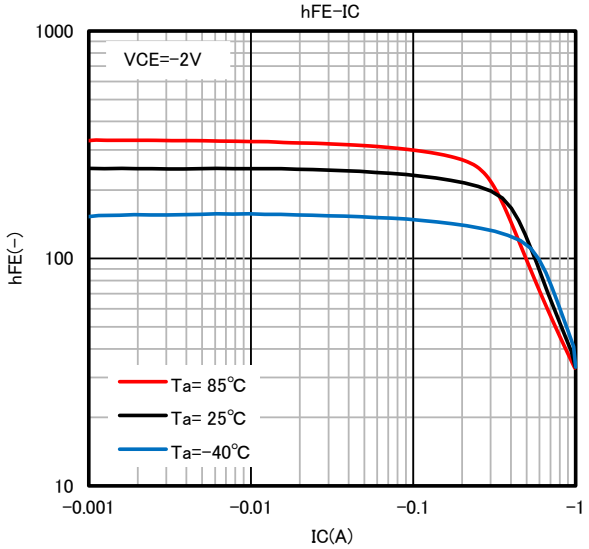
## TYPCAL CHARACTERISTICS

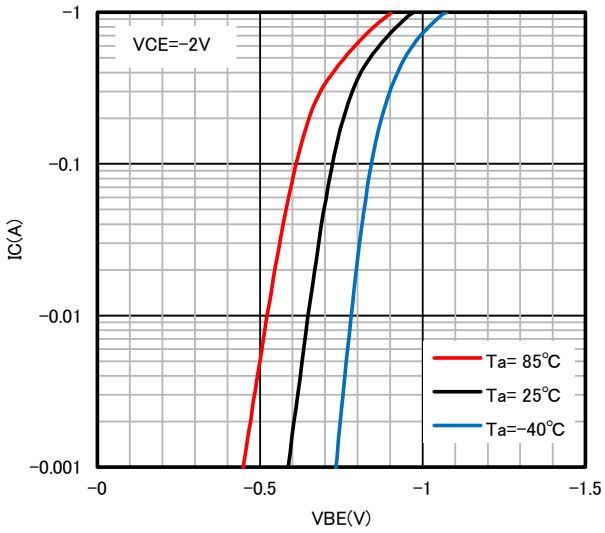
Pc-Ta



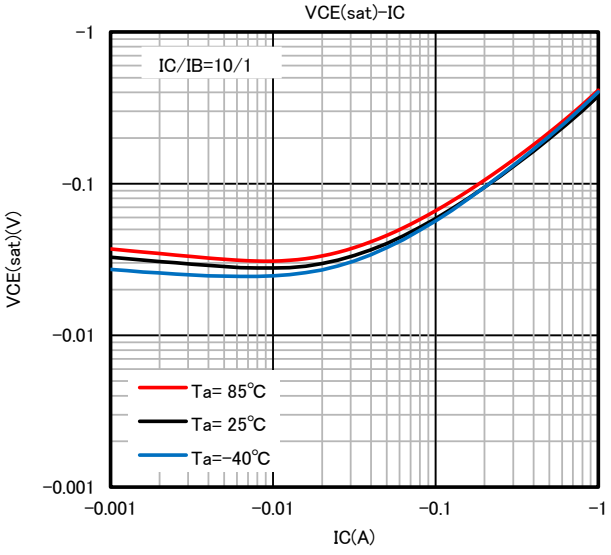

hFE-IC



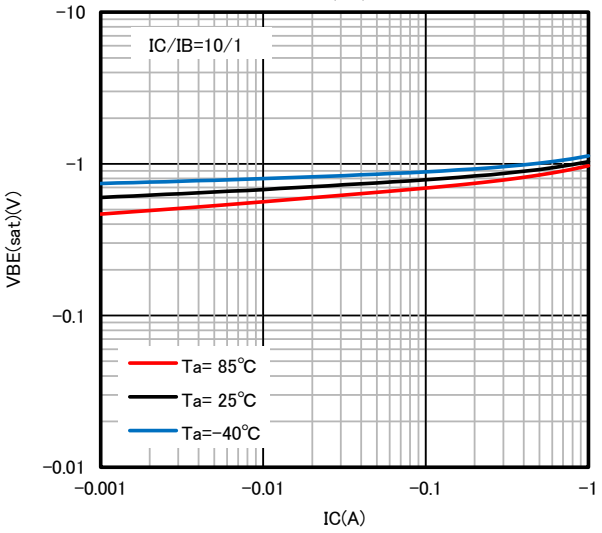

IC-VBE



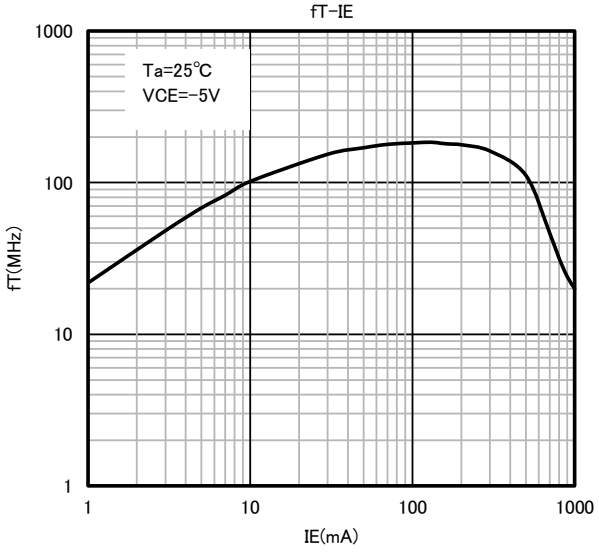

VCE(sat)-IC




VBE(sat)-IC




fT-IE



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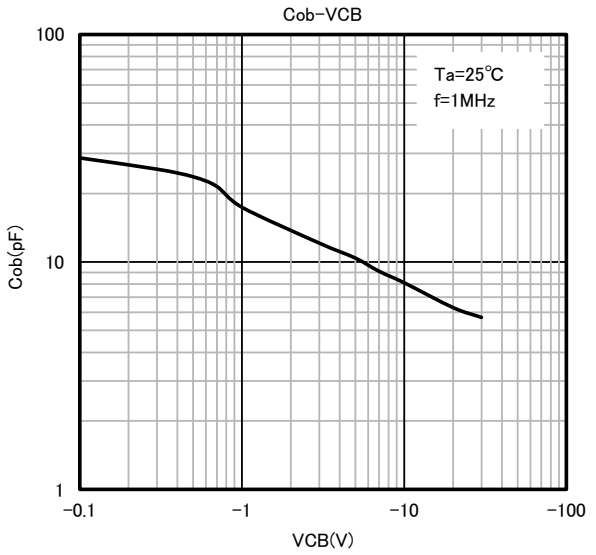


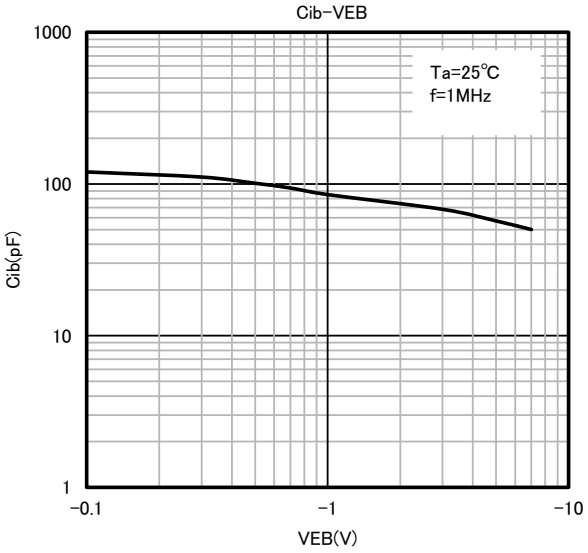


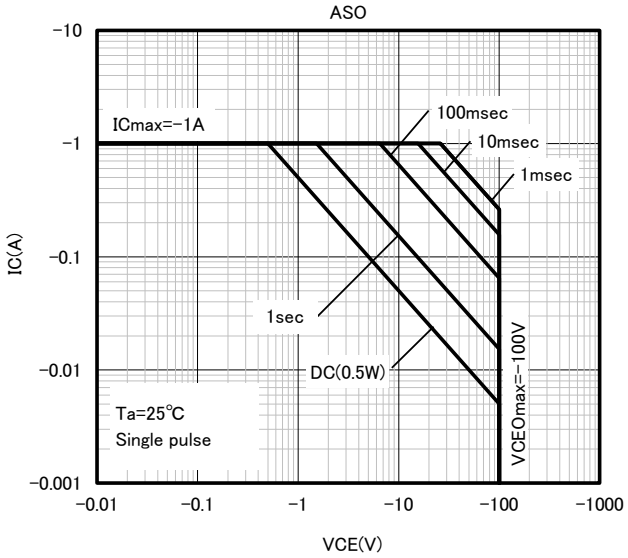

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