

# INA6005BC1-TH50

FOR LOW FREQUENCY AMPLIFY APPLICATION  
SILICON PNP EPITAXIAL TYPE

AEC-Q101 Compliance

## DESCRIPTION

INA6005BC1 is a silicon PNP transistor.

It is designed with high voltage.

## FEATURE

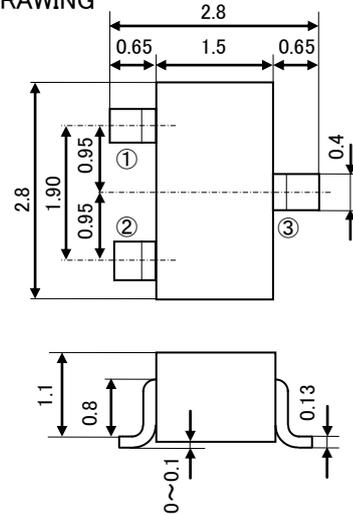
- Super mini package for easy mounting
- High voltage  $V_{CE0} = -400V$

## APPLICATION

DC/DC convertor, High voltage switching

## OUTLINE DRAWING

UNIT: mm



Terminal Connector

JEITA:SC-59

①: Base

JEDEC: Similar to TO-236

②: Emitter

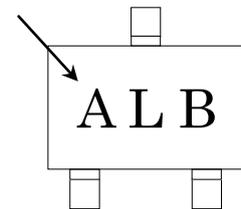
③: Collector

## MAXIMUM RATING ( $T_a=25^\circ C$ )

SYMBOL	PARAMETER	RATING	UNIT
$V_{CBO}$	Collector to Base voltage	-400	V
$V_{EBO}$	Emitter to Base voltage	-7	V
$V_{CEO}$	Collector to Emitter voltage	-400	V
$I_C$	Collector current	-100	mA
$I_{CM}$	Peak collector current	-200	mA
$P_C$	Collector dissipation( $T_a=25^\circ C$ )	200	mW
$T_J$	Junction temperature	+150	$^\circ C$
$T_{stg}$	Storage temperature	-55~+150	$^\circ C$

## MARKING

Type Name



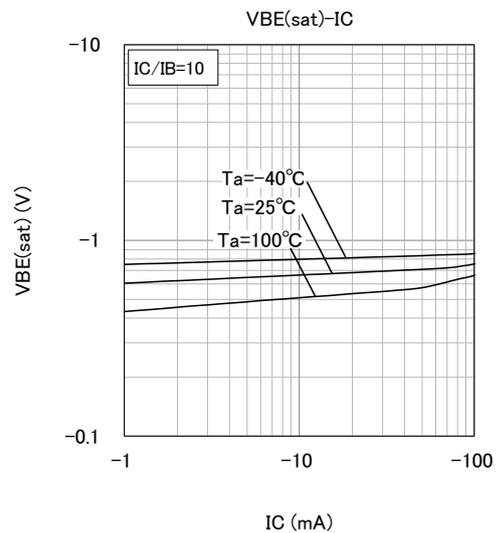
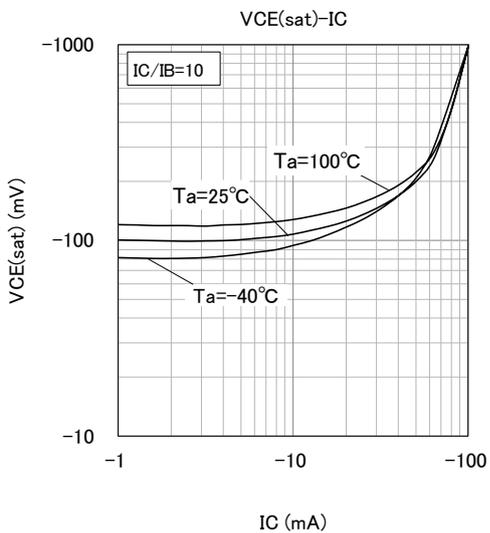
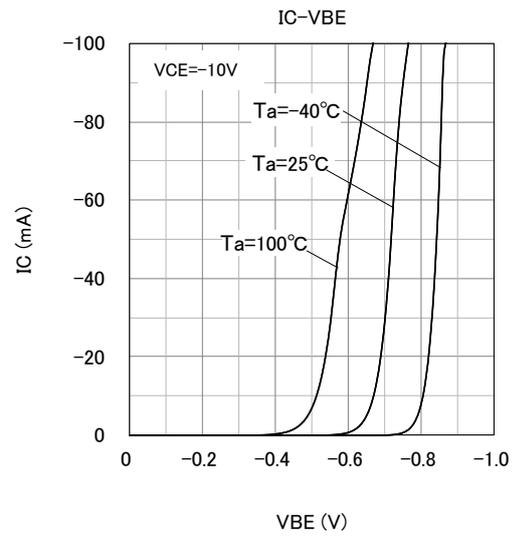
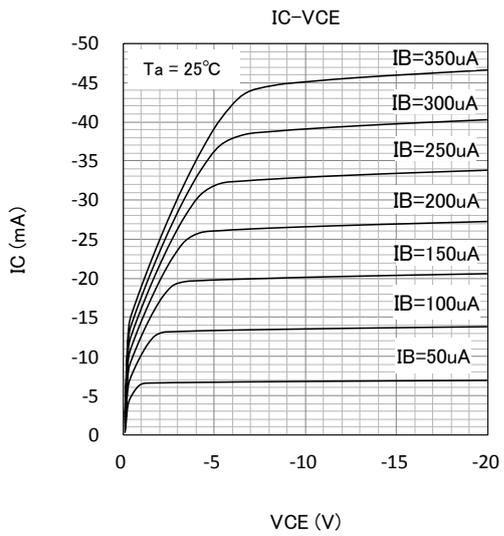
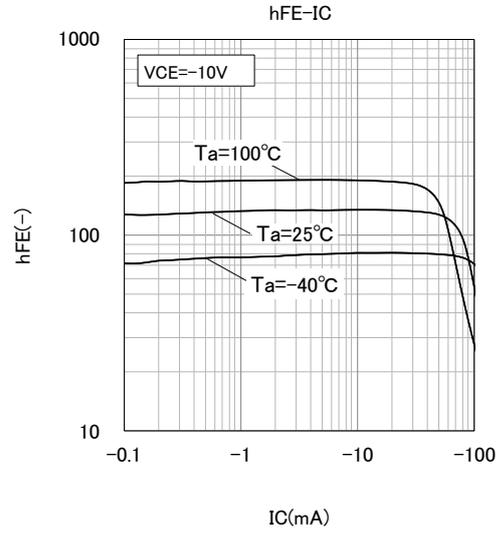
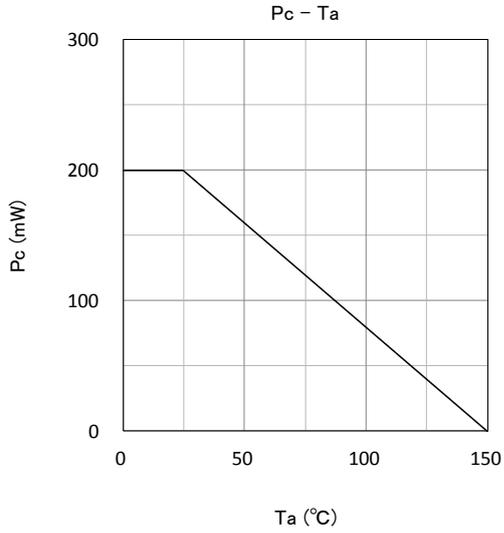
## ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B break down voltage	$I_C = -50\mu A, I_E = 0mA$	-400	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E = -50\mu A, I_C = 0mA$	-7	-	-	V
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -1mA, R_{BE} = \infty$	-400	-	-	V
$I_{CBO}$	Collector cut off current	$V_{CB} = -400V, I_E = 0mA$	-	-	-1	$\mu A$
$I_{EBO}$	Emitter cut off current	$V_{EB} = -6V, I_C = 0mA$	-	-	-1	$\mu A$
$h_{FE}$	DC forward current gain	$V_{CE} = -10V, I_C = -10mA$	82	-	200	-
$V_{CE(sat)}$	C to E saturation voltage	$I_C = -20mA, I_B = -2mA$	-	-	-0.6	V
$f_T$	Gain bandwidth product	$V_{CE} = -20V, I_E = 10mA, f = 100MHz$	-	65	-	MHz
$C_{ob}$	Collector output capacitance	$V_{CB} = -10V, I_E = 0mA, f = 1MHz$	-	5.5	-	pF

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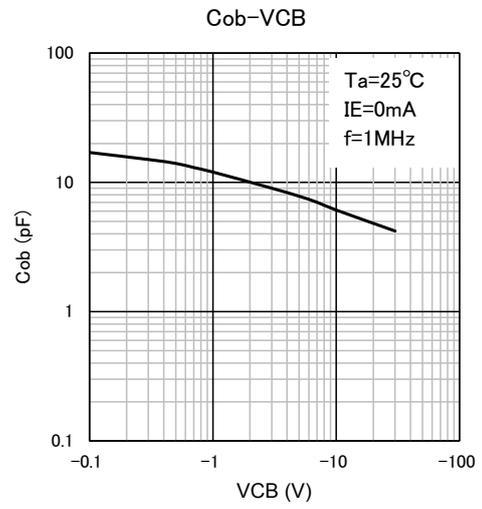
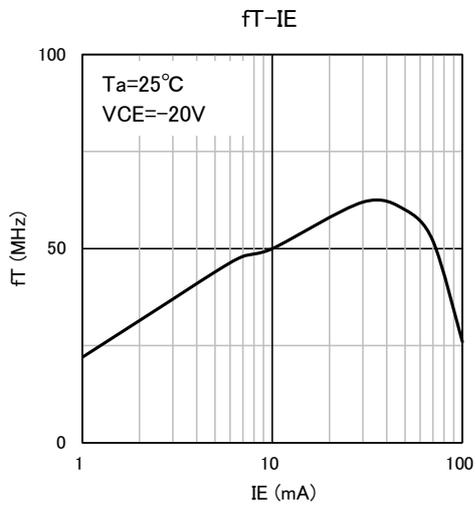
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## TYPICAL CHARACTERISTICS



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