

# INC6005AC1

FOR LOW FREQUENCY AMPLIFY APPLICATION  
SILICON NPN EPITAXIAL TYPE

## DESCRIPTION

INC6005AC1 is a silicon NPN transistor.  
It is designed with high voltage.

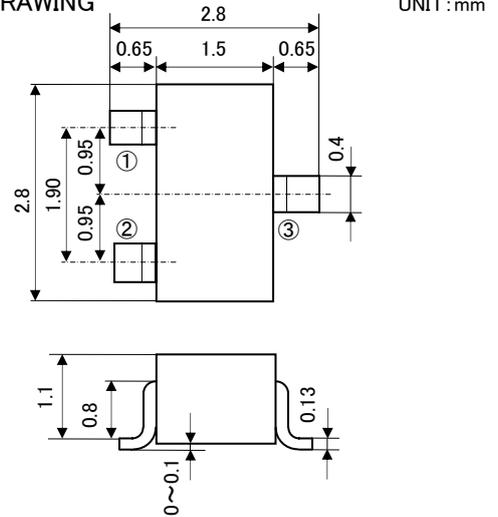
## FEATURE

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

## APPLICATION

DC/DC convertor, High voltage switching

## OUTLINE DRAWING



Terminal Connector

JEITA:SC-59

①: Base

JEDEC: Similar to TO-236

②: Emitter

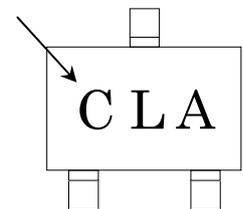
③: Collector

## 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
$P_C$	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



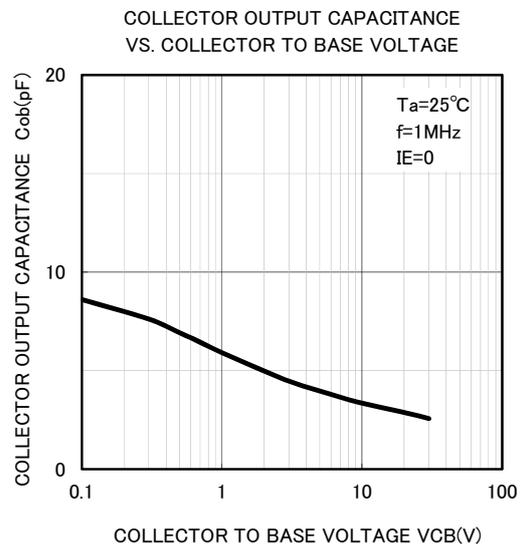
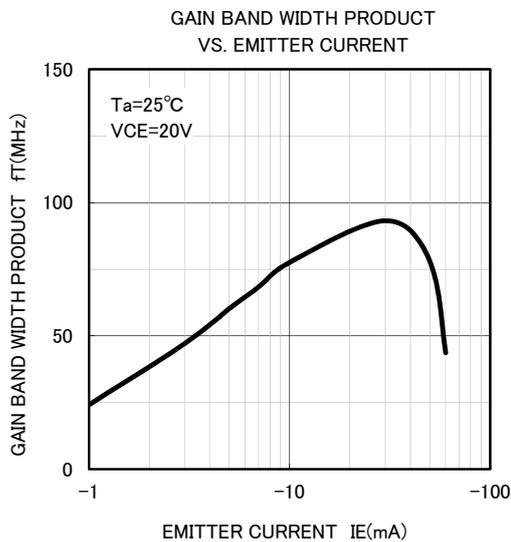
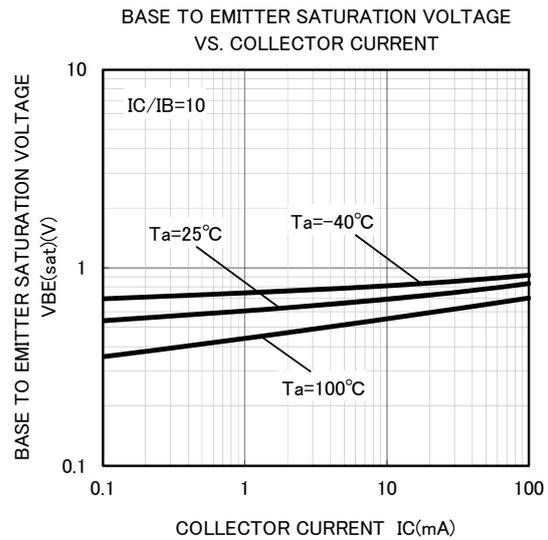
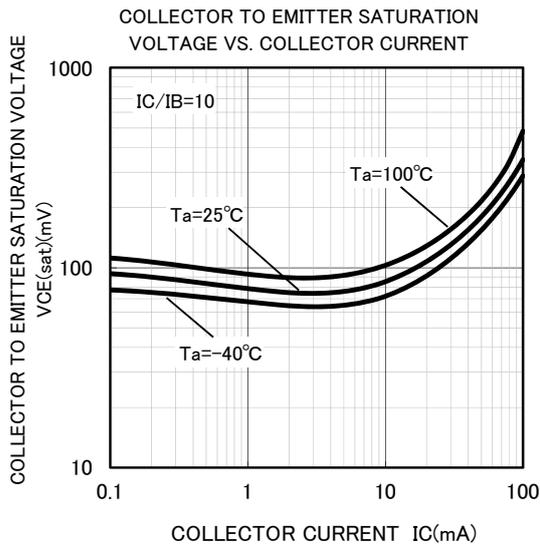
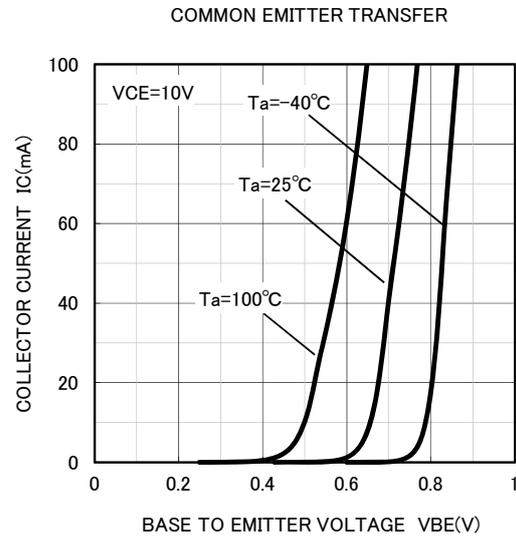
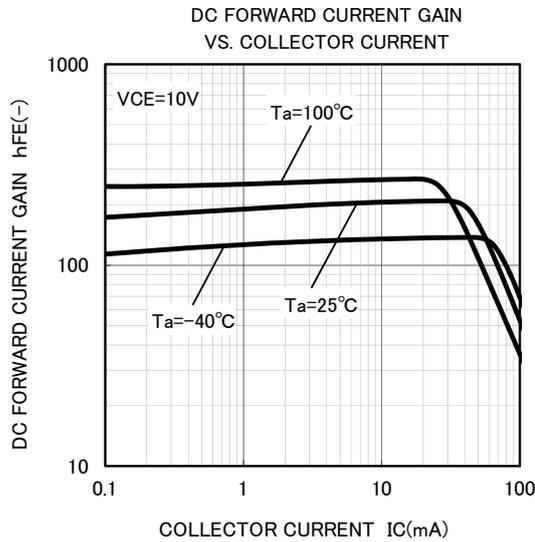
## ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B breakdown voltage	$I_C=50 \mu A, I_E=0mA$	400	-	-	V
$V_{(BR)EBO}$	E to B breakdown voltage	$I_E=50 \mu A, I_C=0mA$	7	-	-	V
$V_{(BR)CEO}$	C to E breakdown 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	-	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
$C_{ob}$	Collector output capacitance	$V_{CB}=10V, I_E=0mA, f=1MHz$	-	3.3	-	pF

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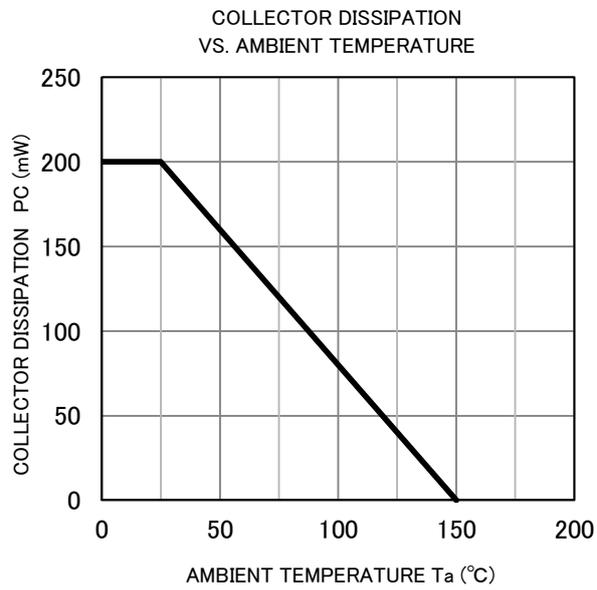
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## TYPICAL CHARACTERISTICS



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