

INC6005AP1

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

INC6005AP1 is a silicon NPN transistor.

It is designed with high voltage.

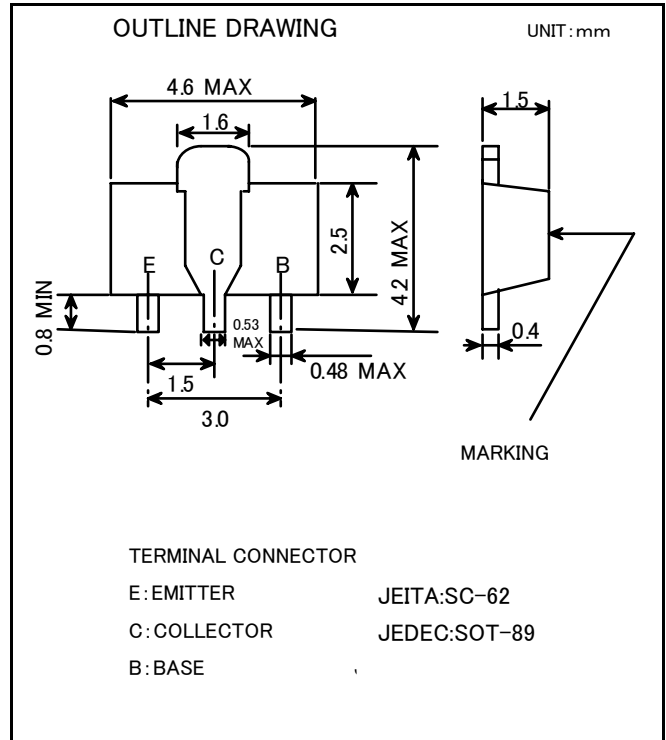
FEATURE

- Small package for easy mounting.

- High voltage $V_{CEO} = 400V$

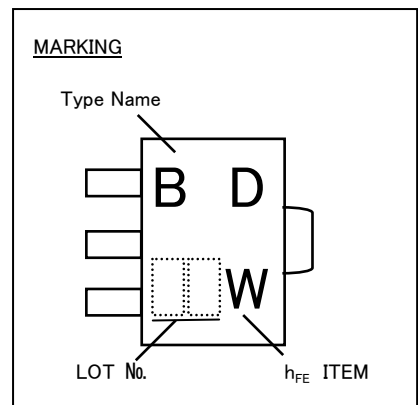
APPLICATION

DC-DC converter, High voltage switching.



MAXIMUM RATING (Ta=25°C)

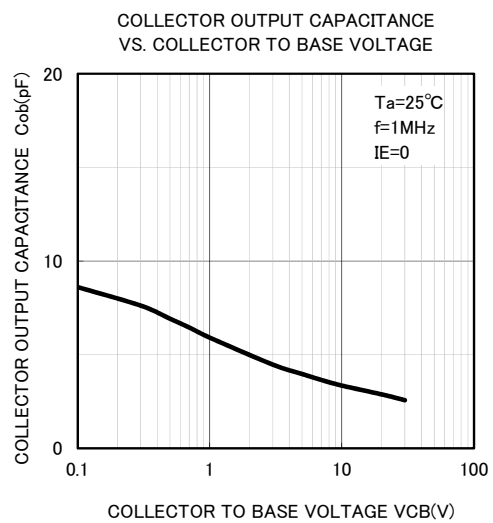
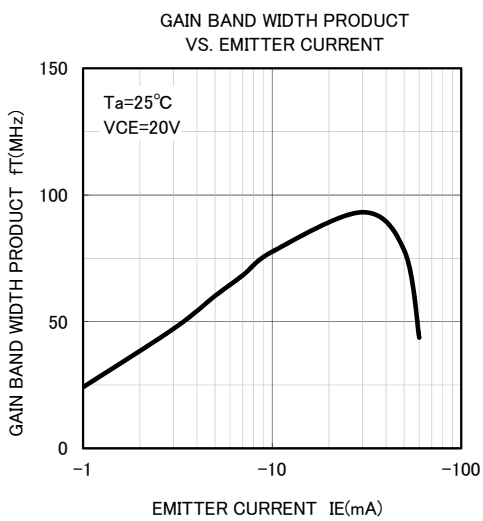
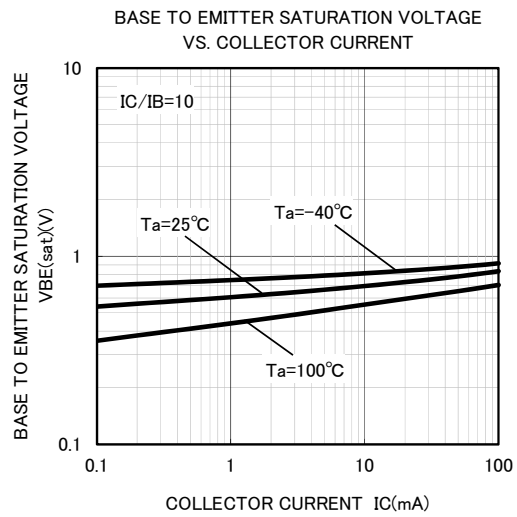
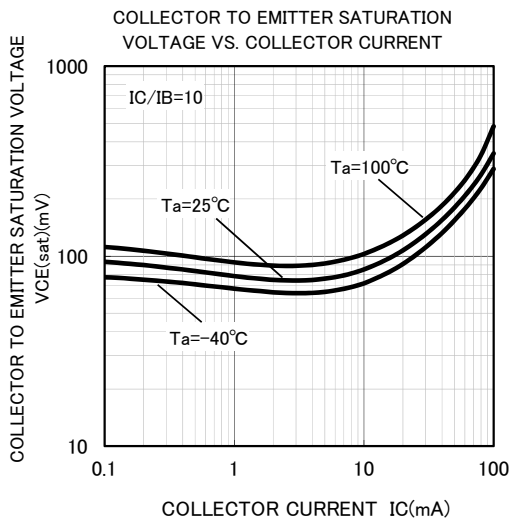
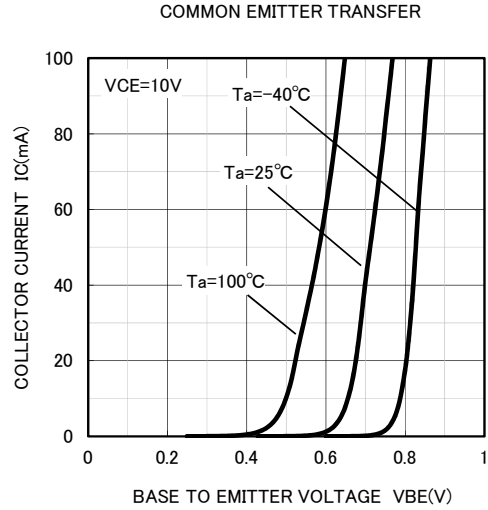
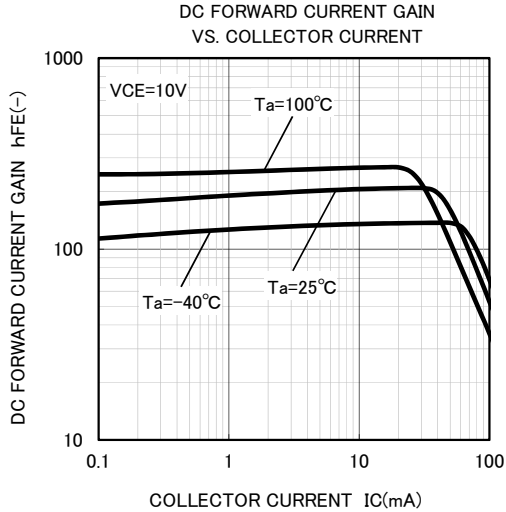
SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	400	V
V_{EBO}	Emitter to Base voltage	7	V
V_{CEO}	Collector to Emitter voltage	400	V
I_C	Collector current	100	mA
P_C	Collector dissipation(Ta=25°C)	500	mW
T_j	Junction temperature	+150	°C
T_{stg}	Storage temperature	-55~+150	°C



ELECTRICAL CHARACTERISTICS (Ta=25°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	μA
I_{EBO}	Emitter cut off current	$V_{EB}=6V, I_C=0mA$	-	-	1	μA
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
fT	Gain bandwidth product	$V_{CE}=20V, I_E=-10mA$	-	70	-	MHz
Cob	Collector output capacitance	$V_{CE}=10V, I_E=0mA, f=1MHz$	-	3.3	-	pF

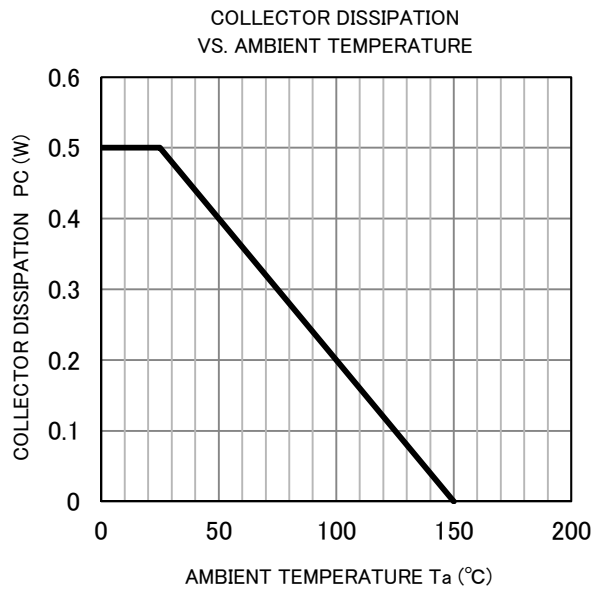
TYPICAL CHARACTERISTICS



<SMALL-SIGNAL TRANSISTOR>

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SILICON NPN EPITAXIAL TYPE





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