

INC6001AP1

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

INC6001AP1 is a silicon NPN transistor.

It is designed with high voltage.

FEATURE

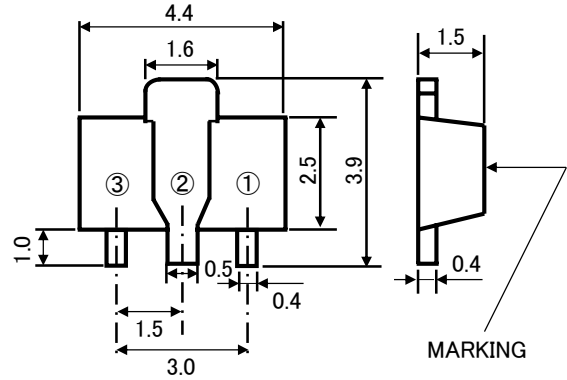
- Small package for easy mounting.
- High voltage $V_{CEO}=100V$
- High collector current $I_C=1A$
- Low saturation voltage $V_{CE(sat)} = 0.5V(MAX)$

APPLICATION

DC/DC converter, Power supply

OUTLINE DRAWING

UNIT: mm

**TERMINAL CONNECTOR**

①: BASE

JEITA: SC-62

②: COLLECTOR

JEDEC: SOT-89

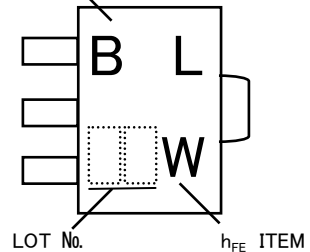
③: EMITTER

MAXIMUM RATING (Ta=25°C)

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°C)	500	mW
T_j	Junction temperature	+150	°C
T_{stg}	Storage temperature	-55~+150	°C

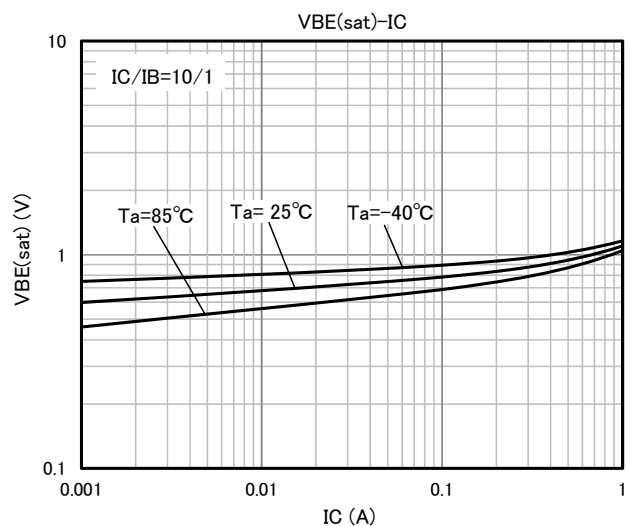
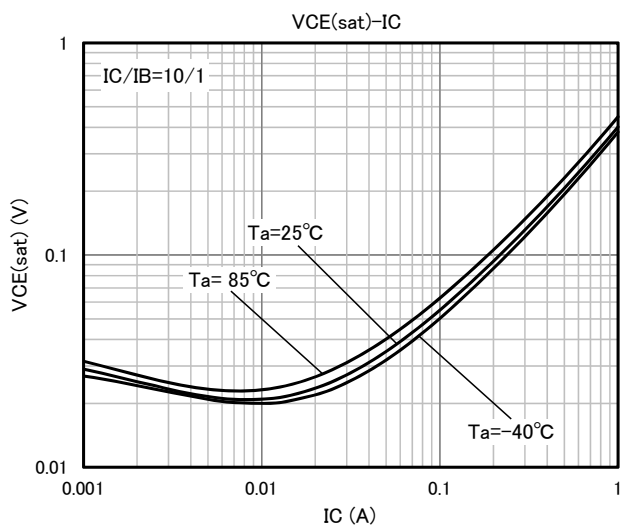
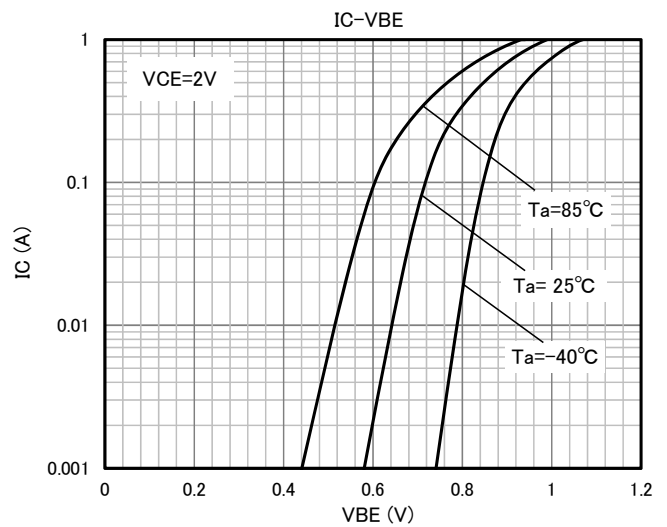
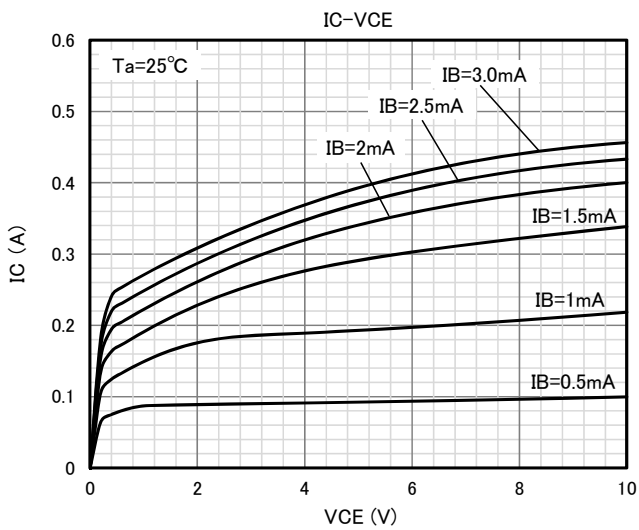
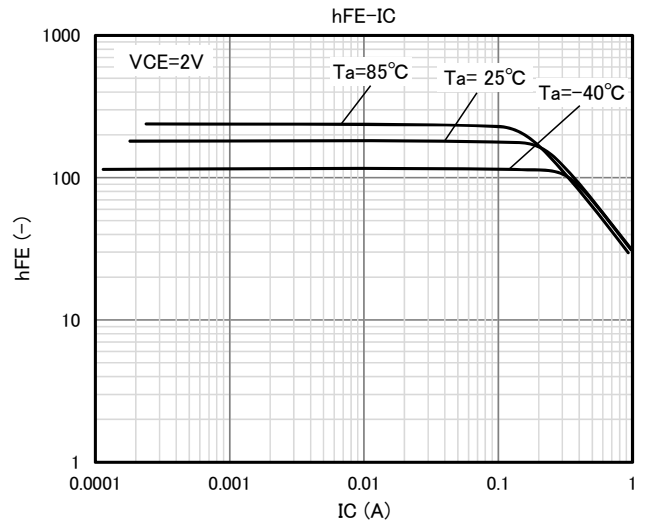
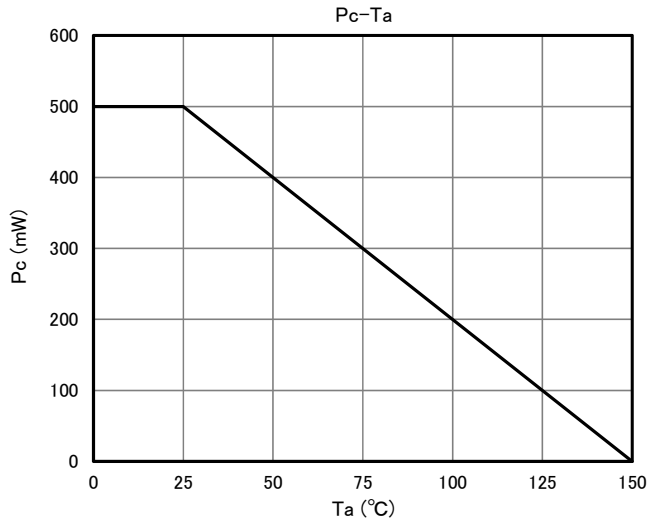
MARKING

Type Name

**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

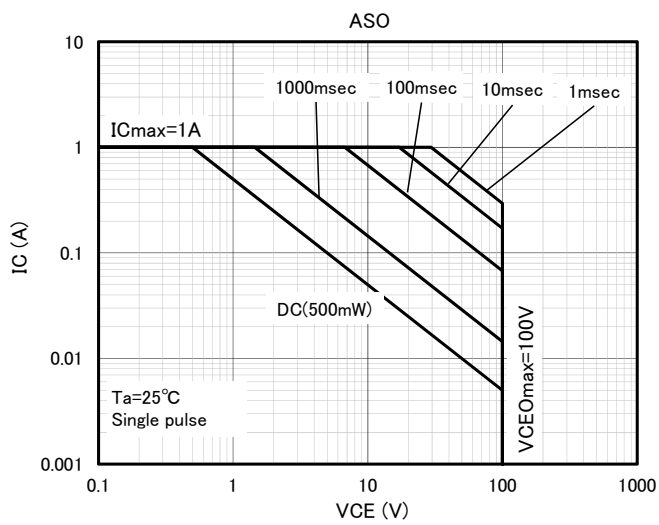
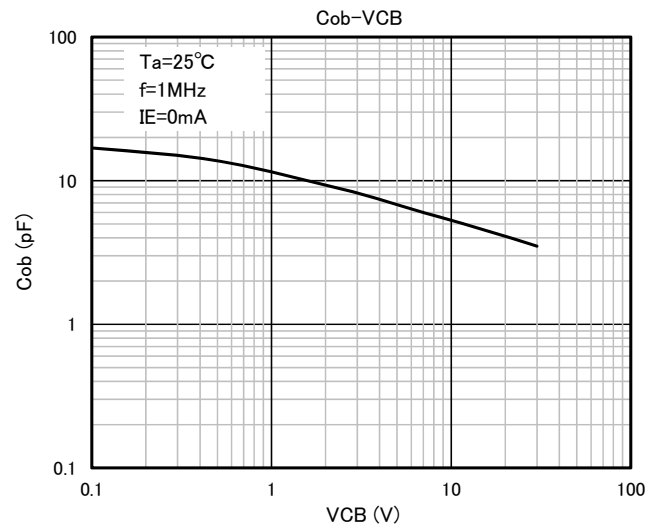
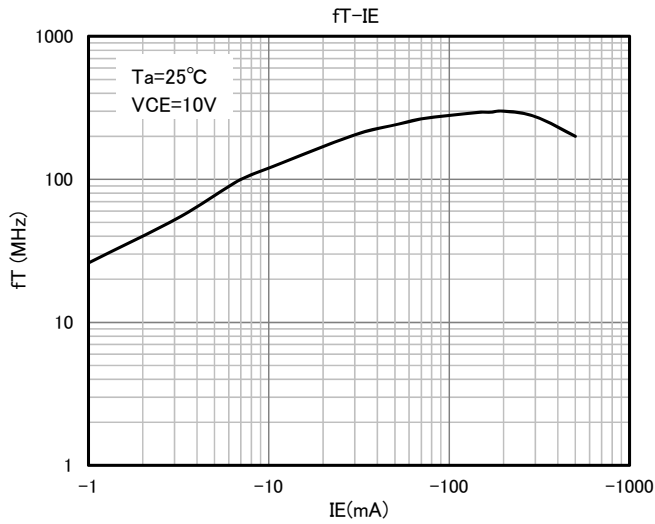
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B breakdown voltage	$I_C=10\mu A, I_E=0mA$	120	-	-	V
$V_{(BR)EBO}$	E to B breakdown voltage	$I_E=10\mu A, I_C=0mA$	6	-	-	V
$V_{(BR)CEO}$	C to E breakdown voltage	$I_C=1mA, R_{BE}=\infty$	100	-	-	V
I_{CBO}	Collector cut off current	$V_{CB}=120V, I_E=0mA$	-	-	500	nA
I_{EBO}	Emitter cut off current	$V_{EB}=6V, I_C=0mA$	-	-	500	nA
h_{FE}	DC forward current gain	$V_{CE}=2V, I_C=150mA$	100	-	300	-
$V_{CE(sat)}$	C to E saturation voltage	$I_C=500mA, I_B=50mA$	-	-	0.5	V
fT	Gain bandwidth product	$V_{CE}=10V, I_E=50mA$	-	270	-	MHz
Cob	Collector output capacitance	$V_{CB}=10V, I_E=0mA, f=1MHz$	-	5	-	pF

TYPICAL CHARACTERISTICS



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SILICON NPN EPITAXIAL TYPE





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