

**PRELIMINARY**

Notice: This is not a final specification  
Some parametric are subject to change.

**INA6006AS1**

FOR LOW FREQUENCY AMPLIFY APPLICATION  
SILICON PNP EPITAXIAL TYPE

**DESCRIPTION**

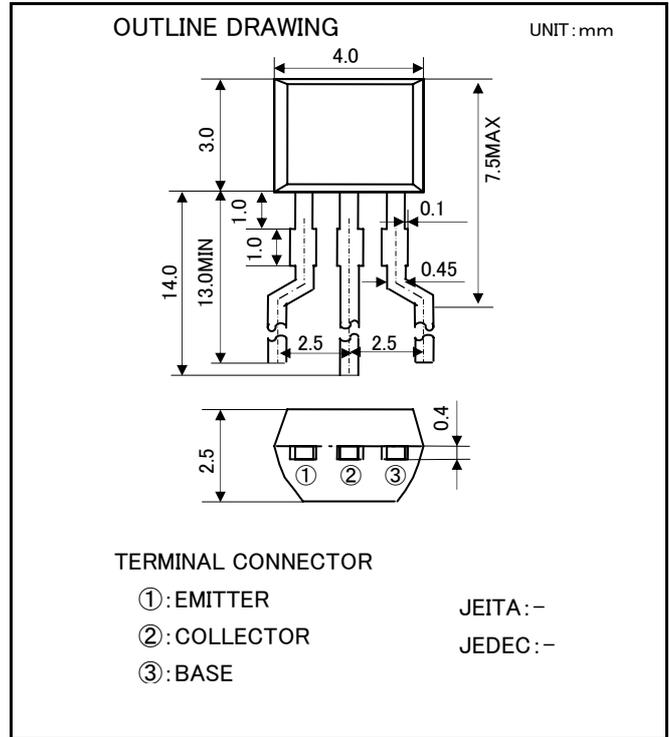
INA6006AS1 is a silicon PNP transistor.  
It is designed with high voltage.

**FEATURE**

- Small package for easy mounting.
- High voltage  $V_{CE0} = -150V$
- Low voltage  $V_{CE(sat)} = -0.5V(MAX)$
- Complementary : INC6006AS1

**APPLICATION**

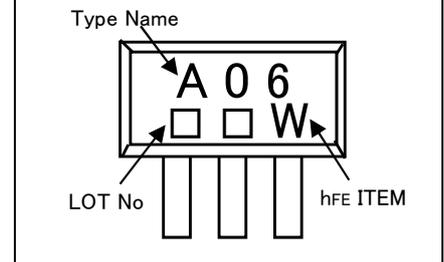
High voltage switching.



**MAXIMUM RATING (Ta=25°C)**

SYMBOL	PARAMETER	RATING	UNIT
$V_{CBO}$	Collector to Base voltage	-160	V
$V_{EBO}$	Emitter to Base voltage	-5	V
$V_{CEO}$	Collector to Emitter voltage	-150	V
$I_{CM}$	Peak collector current	-200	mA
$I_C$	Collector current	-100	mA
$P_C$	Collector dissipation(Ta=25°C)	600	mW
$T_J$	Junction temperature	+150	°C
$T_{stg}$	Storage temperature	-55~+150	°C

**MARKING**



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

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B break down voltage	$I_C = -100 \mu A, I_E = 0mA$	-160	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E = -10 \mu A, I_C = 0mA$	-5	-	-	V
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -1mA, R_{BE} = \infty$	-150	-	-	V
$I_{CBO}$	Collector cut off current	$V_{CB} = -120V, I_E = 0mA$	-	-	-100	nA
$I_{EBO}$	Emitter cut off current	$V_{EB} = -3V, I_C = 0mA$	-	-	-100	nA
$h_{FE1}$	DC forward current gain1	$V_{CE} = -5V, I_C = -1mA$	45	-	-	-
$h_{FE2}$	DC forward current gain2	$V_{CE} = -5V, I_C = -10mA$	90	-	270	-
$h_{FE3}$	DC forward current gain3	$V_{CE} = -5V, I_C = -50mA$	45	-	-	-
$V_{CE(sat)1}$	C to E saturation voltage1	$I_C = -10mA, I_B = -1mA$	-	-	-0.2	V
$V_{CE(sat)2}$	C to E saturation voltage2	$I_C = -50mA, I_B = -5mA$	-	-	-0.5	V
$V_{BE(sat)1}$	B to E saturation voltage1	$I_C = -10mA, I_B = -1mA$	-	-	-1.0	V
$V_{BE(sat)2}$	B to E saturation voltage2	$I_C = -50mA, I_B = -5mA$	-	-	-1.0	V
$V_{BE(on)}$	B to E on voltage	$V_{CE} = -5V, I_C = -10mA$	-	-	-0.77	V
$f_T$	Gain bandwidth product	$V_{CE} = -10V, I_E = 10mA$	100	-	300	MHz
$C_{ob}$	Collector output capacitance	$V_{CB} = -10V, I_E = 0mA, f = 1MHz$	-	2.8	6	pF

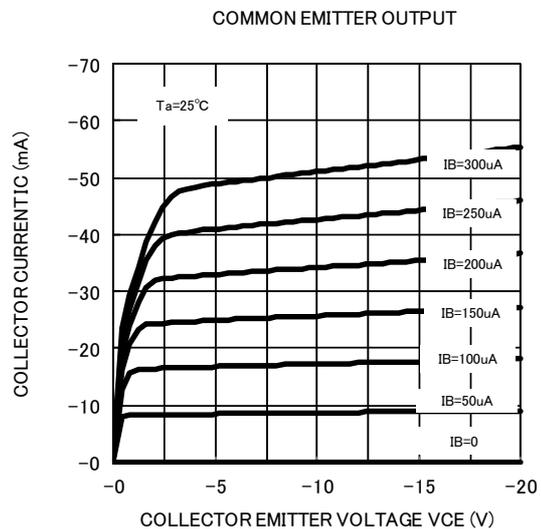
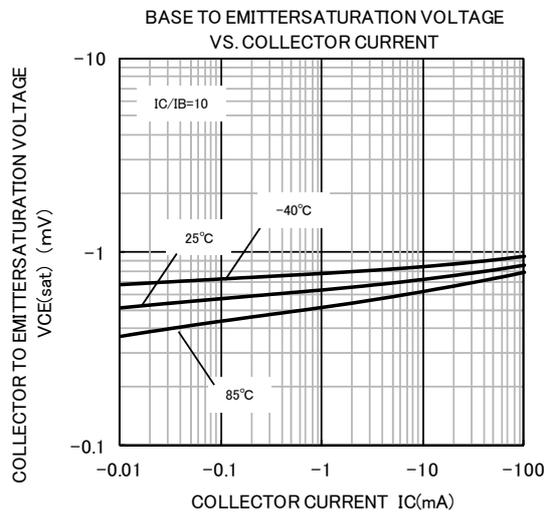
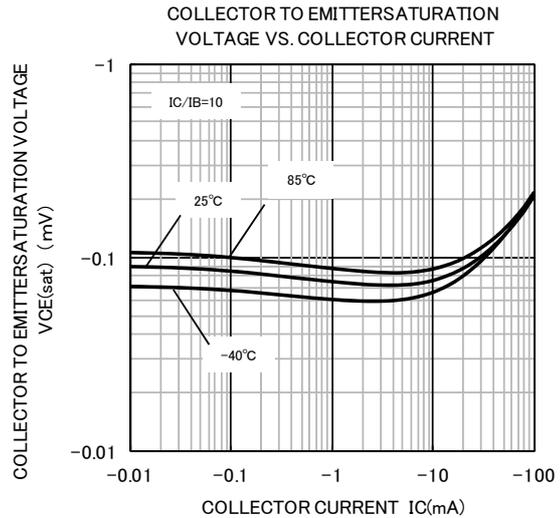
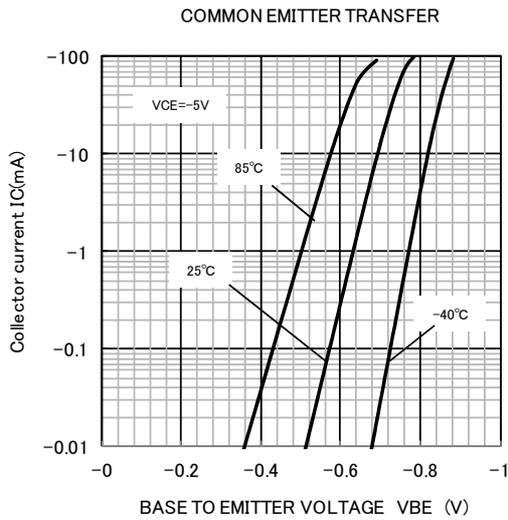
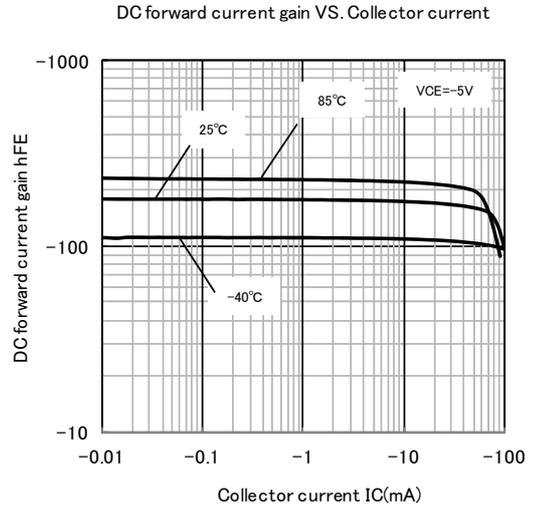
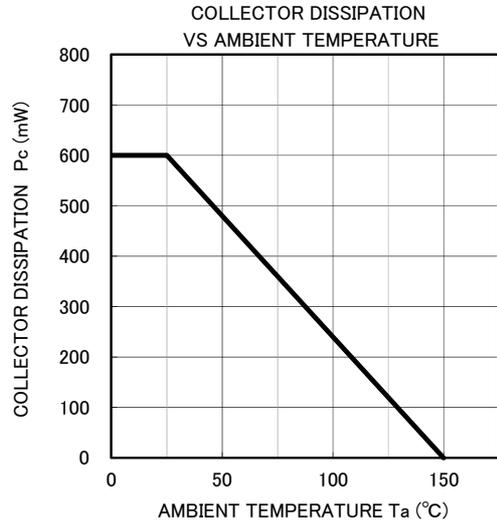
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TYPICAL CHARACTERISTICS

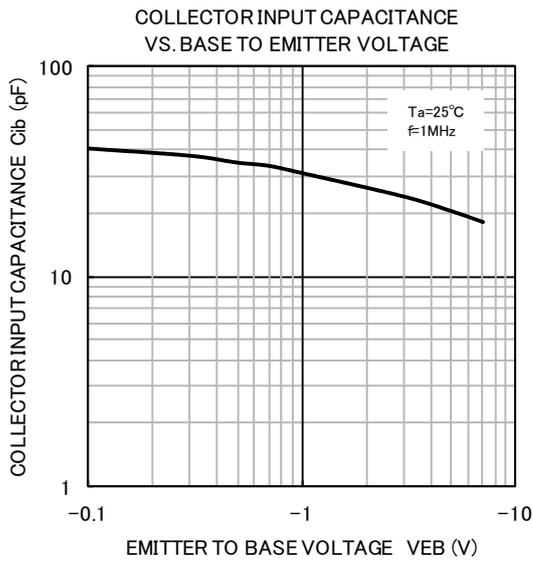
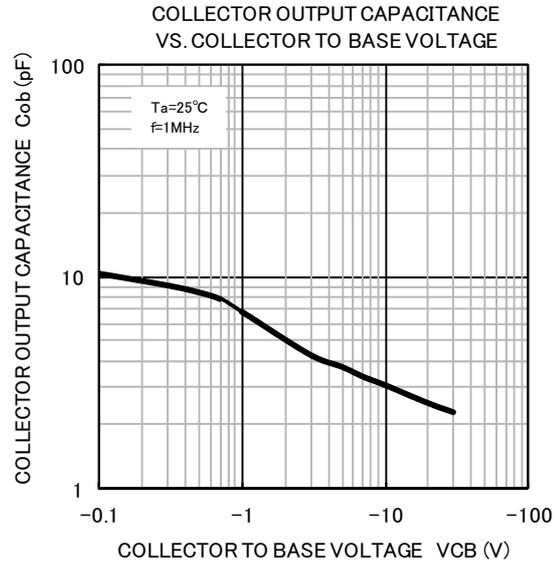
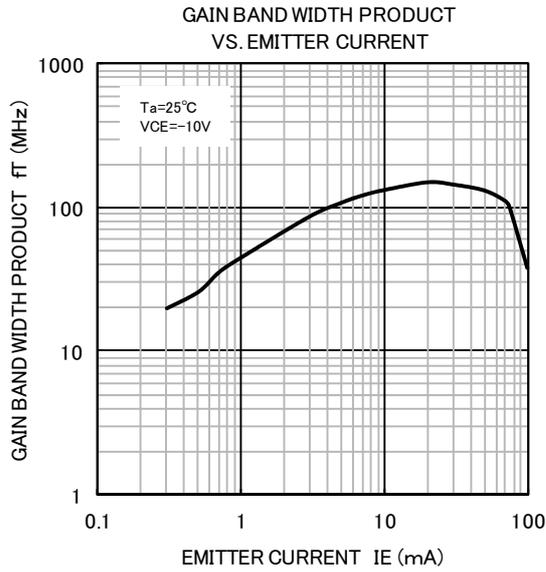


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