

## DESCRIPTION

INC5001AC1 is a super mini package resin sealed silicon NPN epitaxial transistor. It is designed for relay drive or Power supply application.

## FEATURE

- Super mini package for easy mounting
- Low  $V_{CE(sat)}$   $V_{CE(sat)}=0.25V_{max}$  (@ $I_C=500mA/I_B=50mA$ )
- High collector current  $I_C=1A$
- High voltage  $V_{CEO}=60V$

## APPLICATION

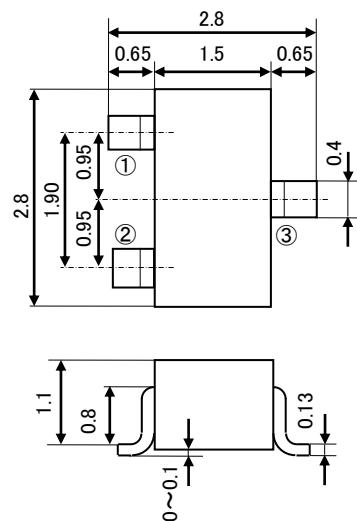
Relay drive, Power supply for audio equipment, VTR, etc

MAXIMUM RATINGS ( $T_a=25^\circ C$ )

Symbol	Parameter	Ratings	Unit
$V_{CBO}$	Collector to Base voltage	80	V
$V_{EBO}$	Emitter to Base voltage	5	V
$V_{CEO}$	Collector to Emitter voltage	60	V
$I_C$	Collector current	1	A
$I_{CM}$	Peak collector current	2	A
$P_C$	Collector dissipation	200	mW
$T_j$	Junction temperature	+150	°C
$T_{stg}$	Storage temperature	-55~+150	°C

## OUTLINE DRAWING

Unit:mm



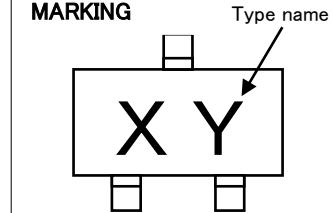
Terminal Connector

- ①: Base
- ②: Emitter
- ③: Collector

JEITA:SC-59

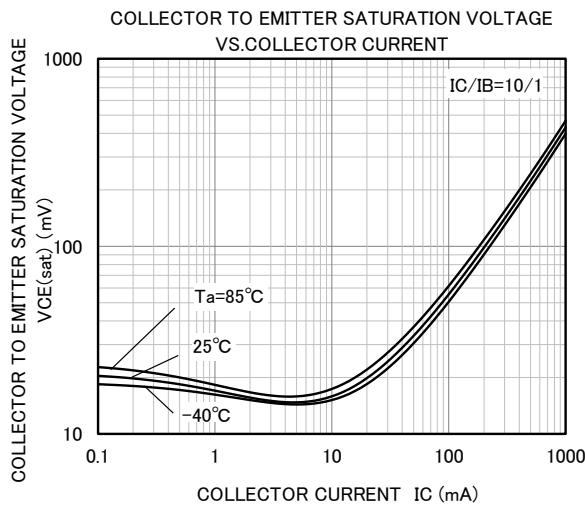
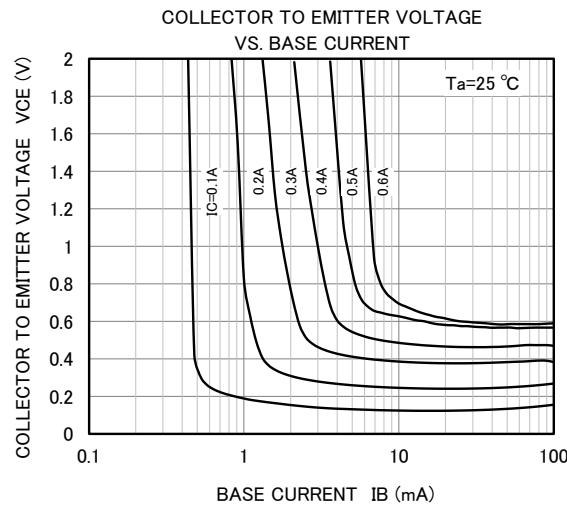
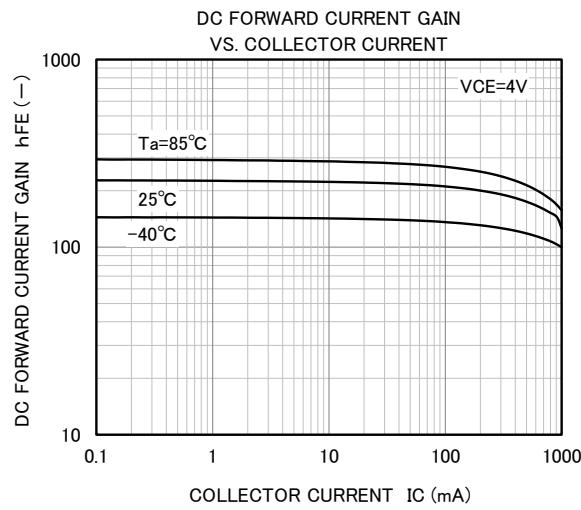
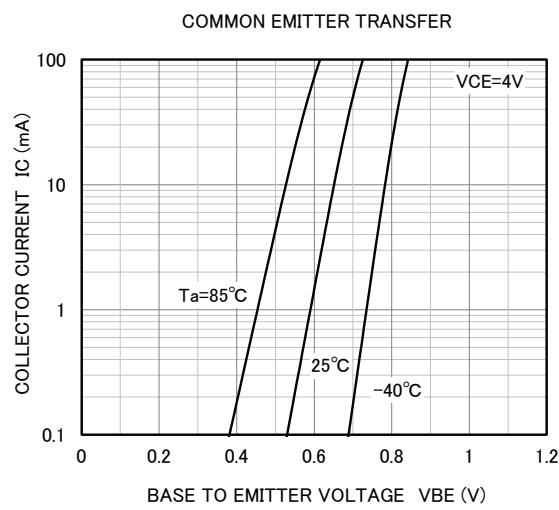
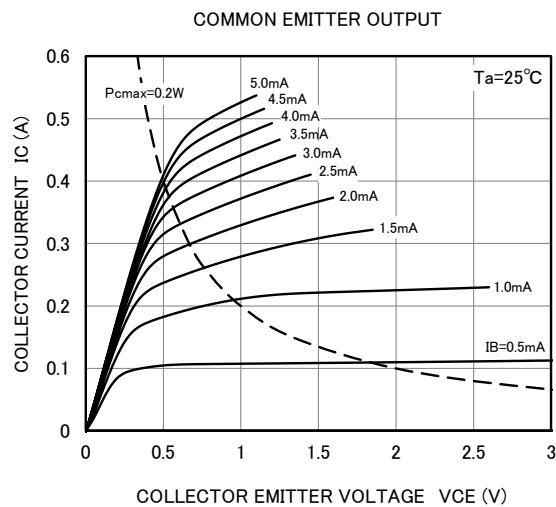
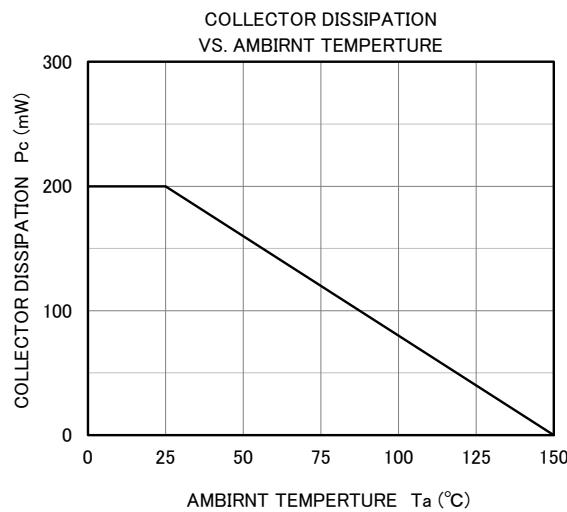
JEDEC: Similar to TO-236

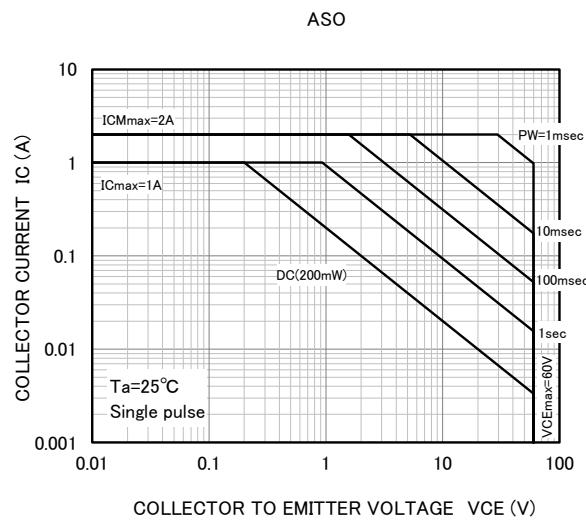
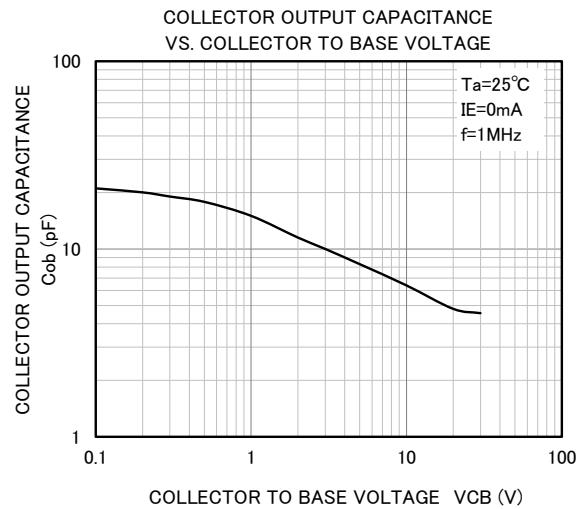
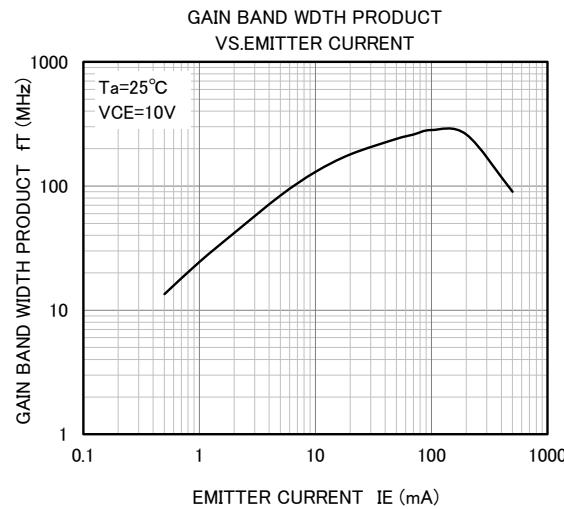
## MARKING

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	$I_C=10\mu A, I_E=0$	80	—	—	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=10\mu A, I_C=0$	5	—	—	V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=1mA, R_{BE}=\infty$	60	—	—	V
$I_{CBO}$	Collector cut off current	$V_{CB}=80V, I_E=0mA$	—	—	0.1	$\mu A$
$I_{EBO}$	Emitter cut off current	$V_{EB}=5V, I_C=0mA$	—	—	0.1	$\mu A$
$h_{FE}$	DC forward current gain	$V_{CE}=4V, I_C=0.1A$	130	—	320	—
$V_{CE(sat)}$	C to E Saturation Voltage	$I_C=500mA, I_B=50mA$	—	—	0.25	V
$f_T$	Gain bandwidth product	$V_{CE}=10V, I_E=-50mA$	—	240	—	MHz
$C_{ob}$	Collector output capacitance	$V_{CB}=10V, I_E=0mA, f=1MHz$	—	—	10	pF

## TYPICAL CHARACTERISTICS





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**Keep safety first in your circuit designs!**

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