

INC5001AC1

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

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

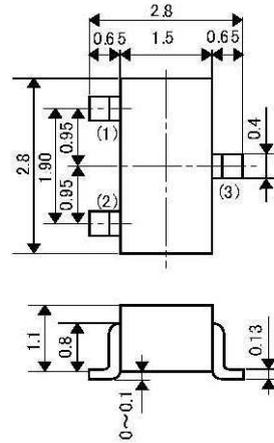
Relay drive, Power supply for audio equipment, VTR , etc

MAXIMUM RATINGS (Ta=25°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



JEITA: SC-59

JEDEC: Similar to TO-236

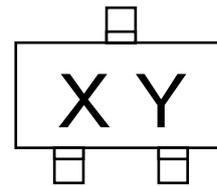
TERMINAL CONNECTER

①: BASE

②: EMITTER

③: COLLECTOR

MARKING

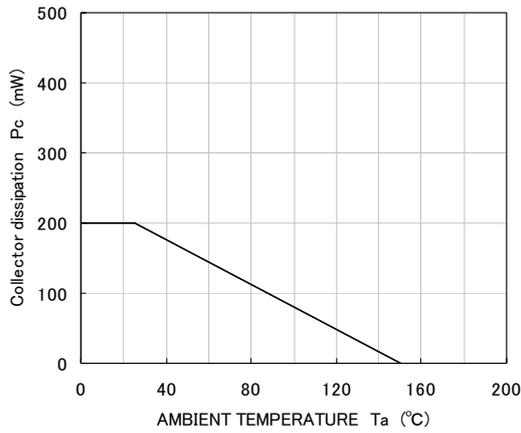


ELECTRICAL CHARACTERISTICS (Ta=25°C)

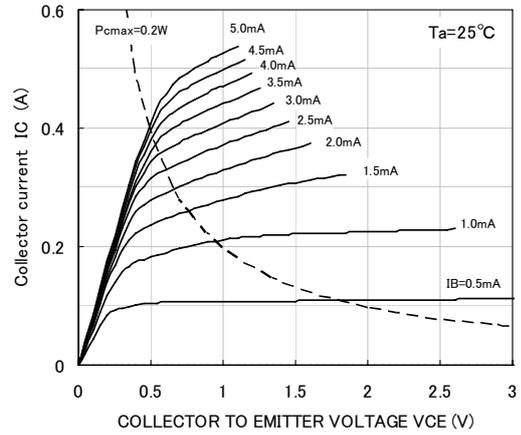
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=10\mu A, I_E=0$	80	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=10\mu A, I_C=0$	5	-	-	V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=1mA, R_{BE}=\infty$	60	-	-	V
I_{CBO}	Collector cut off current	$V_{CB}=80V, I_E=0mA$	-	-	0.1	μA
I_{EBO}	Emitter cut off current	$V_{EB}=5V, I_C=0mA$	-	-	0.1	μA
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

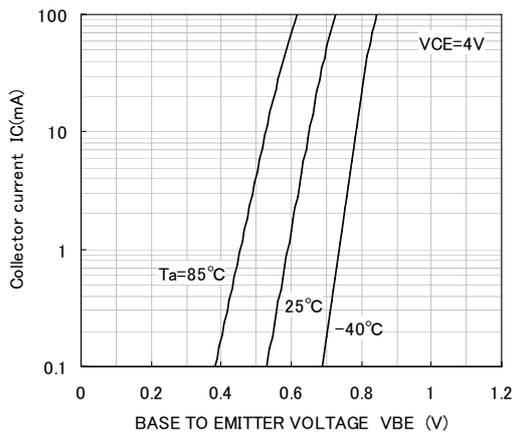
Collector dissipation-AMBIENT TEMPERATURE



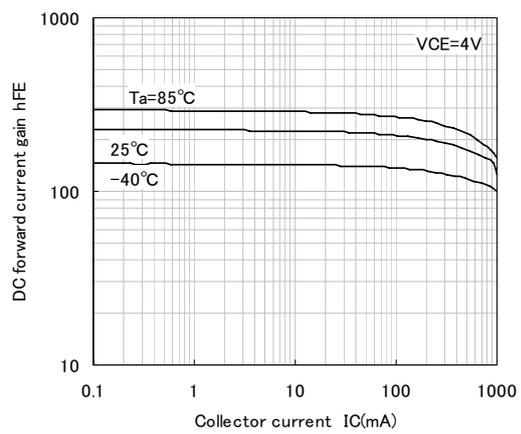
COMMON EMITTER OUTPUT



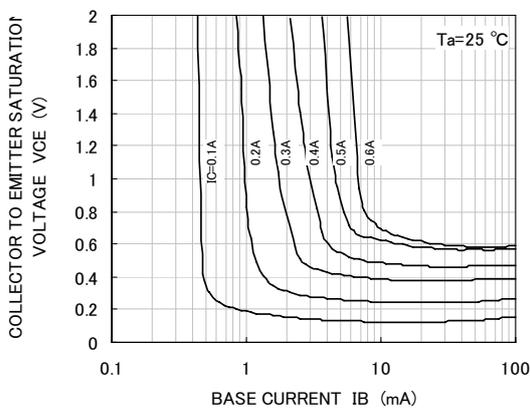
COMMON EMITTER TRANSFER



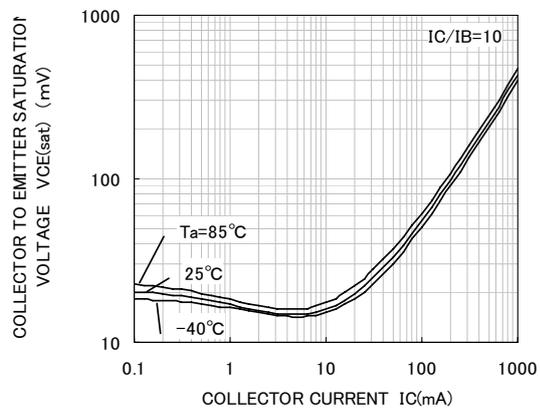
DC forward current gain VS. Collector current



COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT



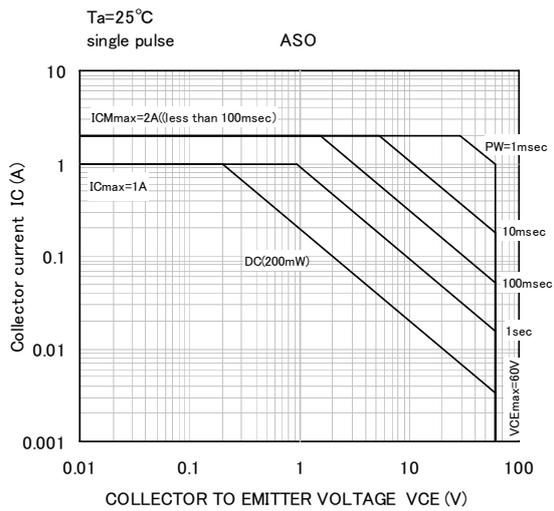
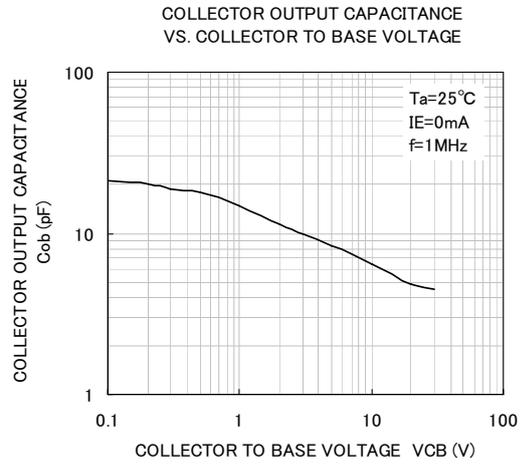
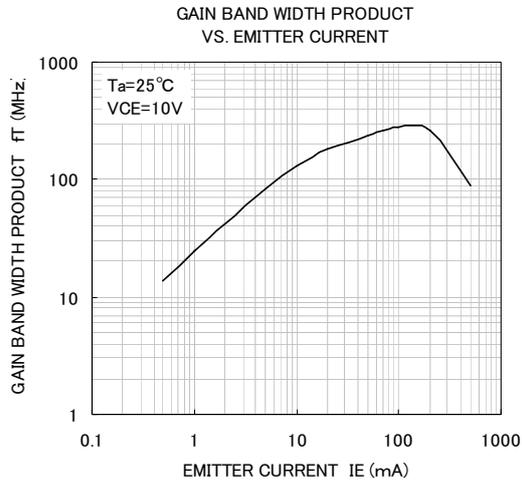
COLLECTOR TO EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT



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TYPICAL CHARACTERISTICS





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