〈SMALL-SIGNAL TRANSISTOR〉

INA5001AC1

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

INA5001AC1 is a super mini package resin sealed silicon PNP epitaxial transistor.
It is designed for relay drive or Power supply application.

FEATURE

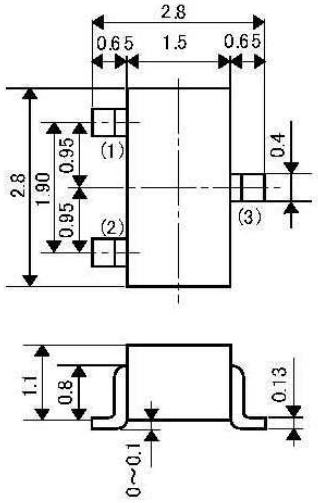
- Super mini package for easy mounting
- Low $V_{CE(sat)}$ $V_{CE(sat)}$=−0.5V_{max} (@I_C=−500mA/I_B=−50mA)
- High collector current I_C=−1A
- High voltage V_{CEO}=−50V

APPLICATION

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

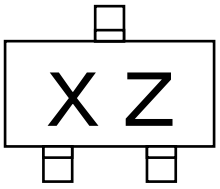
OUTLINE DRAWING

Unit:mm



JEITA:SC-59
JEDEC:Similar to TO-236
TERMINAL CONNECTER
①:BASE
②:EMITTER
③:COLLECTOR

MARKING



MAXIMUM RATINGS(Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	−50	V
V_{EBO}	Emitter to Base voltage	−5	V
V_{CEO}	Collector to Emitter voltage	−50	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	℃
T_{stg}	Storage temperature	−55～+150	℃

ELECTRICAL CHARACTERISTICS(Ta=25℃)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	I_C=−10μA, I_E=0	−50	−	−	V
$V_{(BR)EBO}$	E to B break down voltage	I_E=−10μA, I_C=0	−5	−	−	V
$V_{(BR)CEO}$	C to E break down voltage	I_C=−1mA, R_{BE}=∞	−50	−	−	V
I_{CBO}	Collector cut off current	V_{CB}=−50V, 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	160	−	380	
$V_{CE(sat)}$	C to E Saturation Voltage	I_C=−500mA, I_B=−50mA	−	−	−0.5	V
f_T	Gain bandwidth product	V_{CE}=−2V, I_E=500mA	−	120	−	MHz
C_{ob}	Collector output capacitance	V_{CB}=−10V, I_E=0mA, f=1MHz	−	12	−	pF

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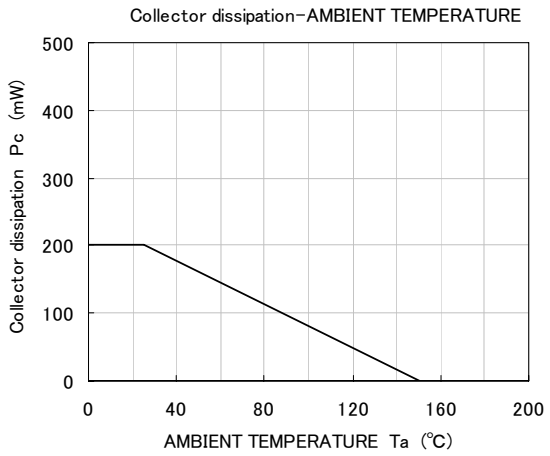
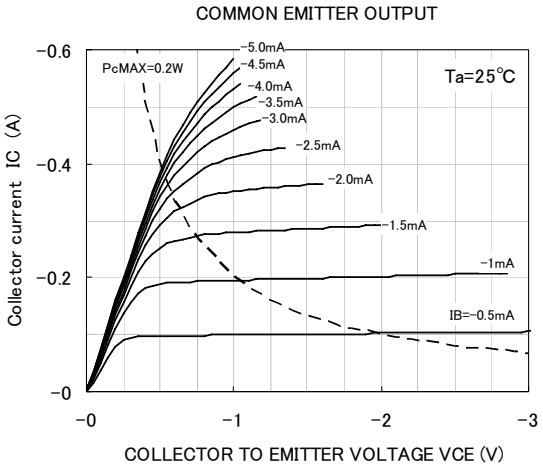
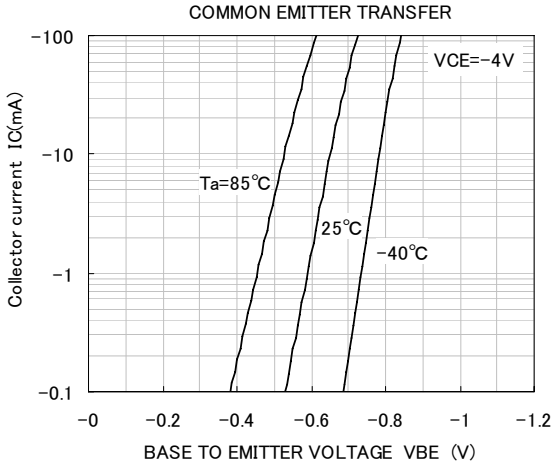
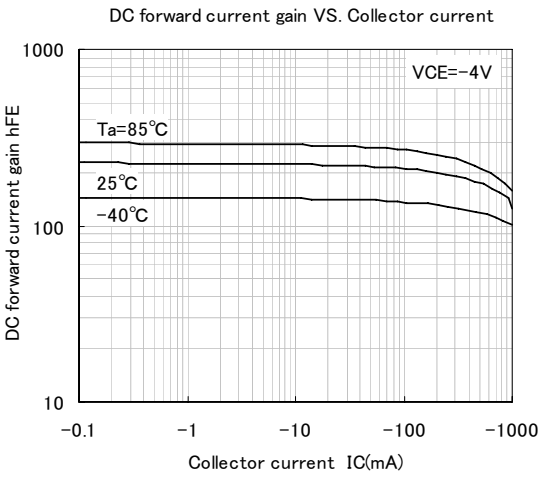
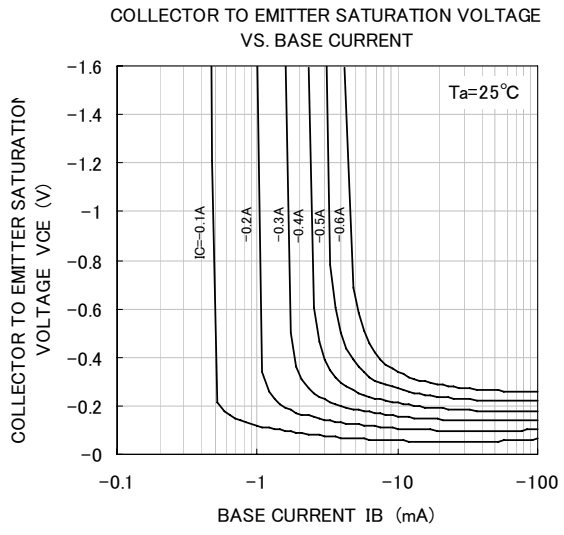
TYPICAL CHARACTERISTICS

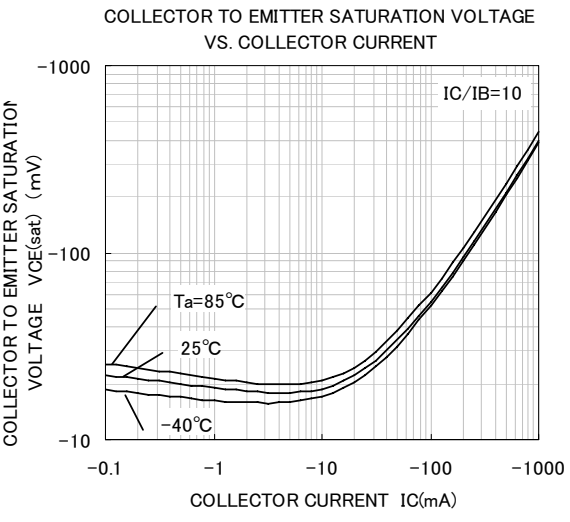












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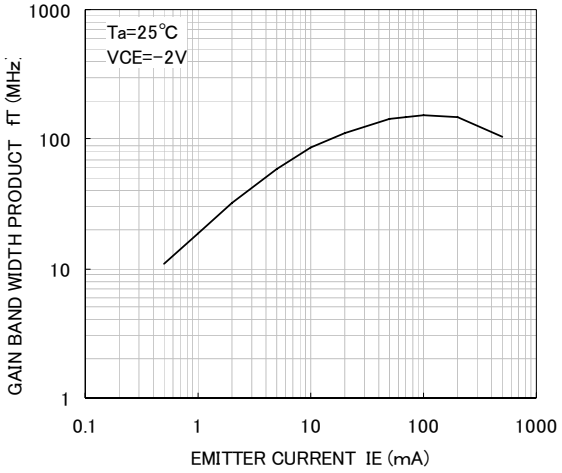
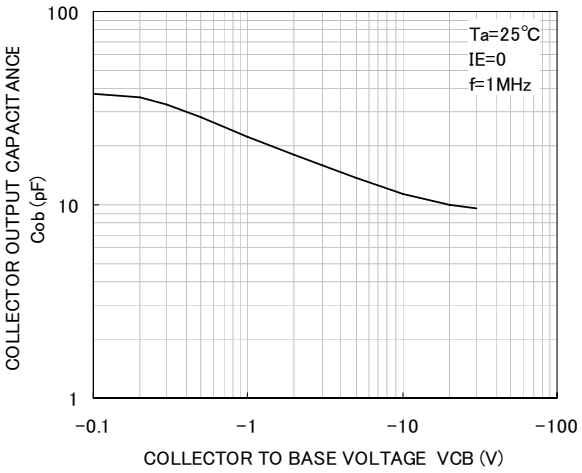
TYPICAL CHARACTERISTICS

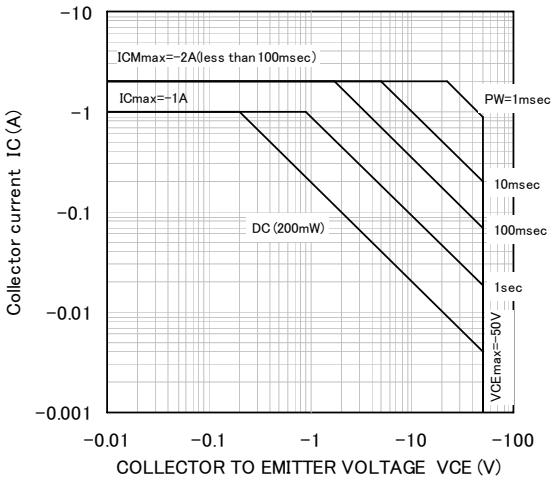
GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE



Ta=25℃
single pulse
ASO



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Apr.2010