

INA5001AP1

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

INA5001AP1 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 $V_{CE(sat)}$ $V_{CE(sat)} = -0.5 \text{ V max} (@I_C = -500\text{mA}/I_B = -50\text{mA})$
- High collector current $I_C = -1\text{A}$
- High voltage $V_{CEO} = -50\text{V}$

APPLICATION

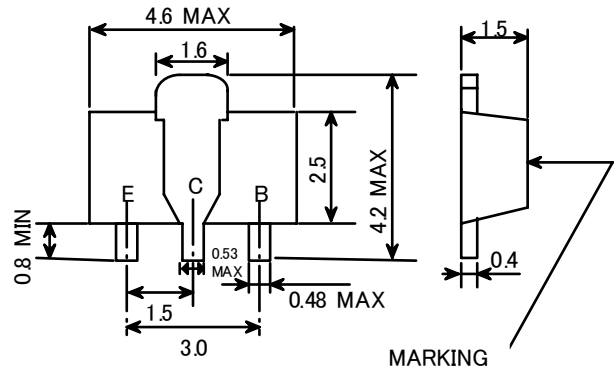
Relay drive, Power supply for audio equipment, VTR, etc

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

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	500	mW
T_j	Junction temperature	+150	$^\circ\text{C}$
T_{stg}	Storage temperature	-55 ~ +150	$^\circ\text{C}$

OUTLINE DRAWING

Unit: mm

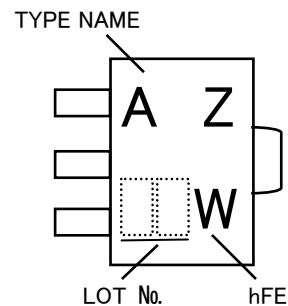


TERMINAL CONNECTER

- ①: BASE
- ②: EMITTER
- ③: COLLECTOR

JEITA:SC-62
JEDEC:SOT-89

MARKING



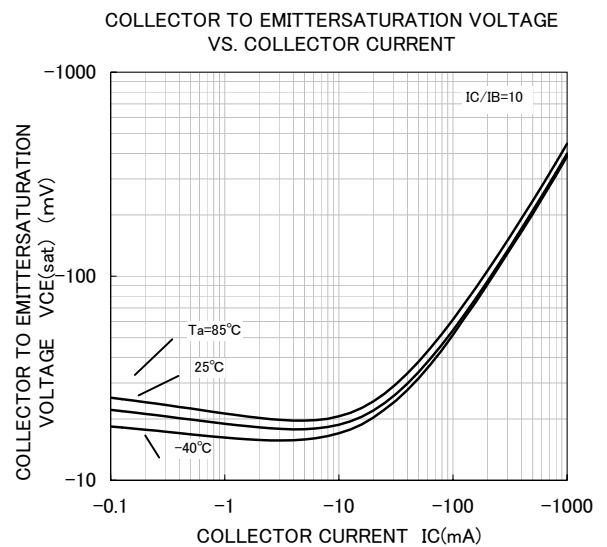
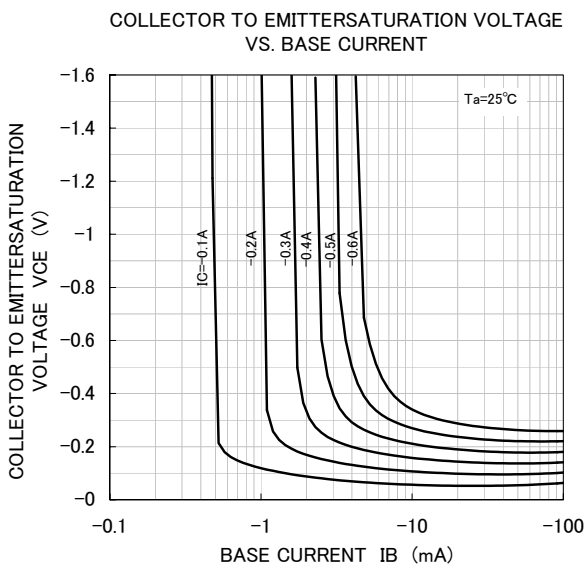
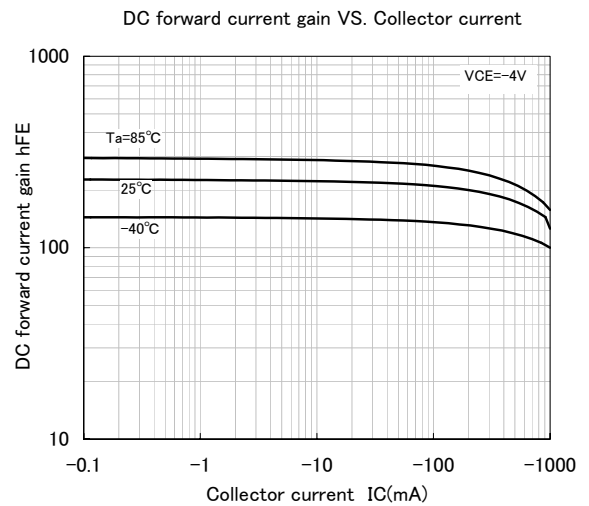
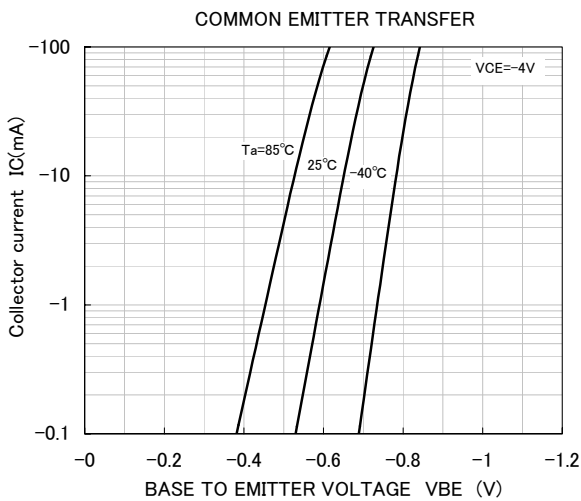
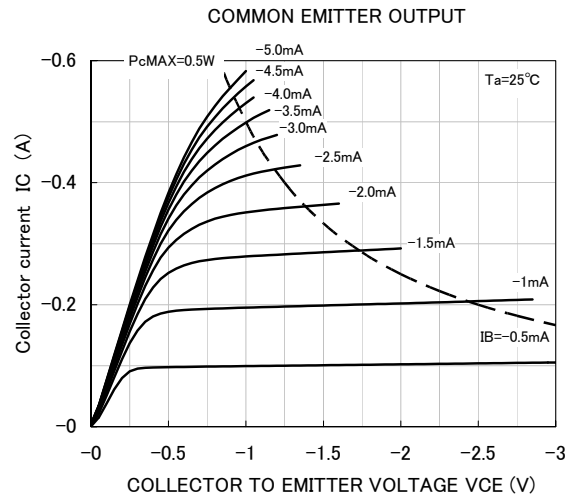
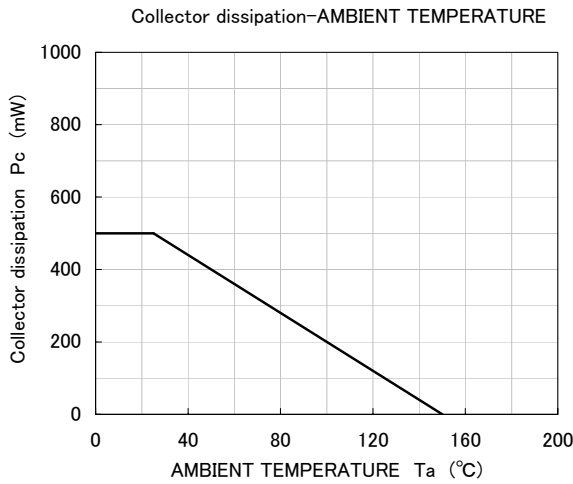
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
C to B break down voltage	$V(BR)_{CBO}$	$I_C = -10 \mu\text{A}, I_E = 0\text{mA}$	-50			V
E to B break down voltage	$V(BR)_{EBO}$	$I_E = -10 \mu\text{A}, I_C = 0\text{mA}$	-5			V
C to E break down voltage	$V(BR)_{CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-50			V
Collector cut off current	I_{CBO}	$V_{CB} = -50\text{V}, I_E = 0\text{mA}$			-0.1	μA
Emitter cut off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0\text{mA}$			-0.1	μA
DC forward current gain	hFE	$V_{CE} = -4\text{V}, I_C = -0.1\text{A}$	160		380	-
C to E Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.5	V
Gain bandwidth product	fT	$V_{CE} = -2\text{V}, I_E = 500\text{mA}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0\text{mA}, f = 1\text{MHz}$		12		pF

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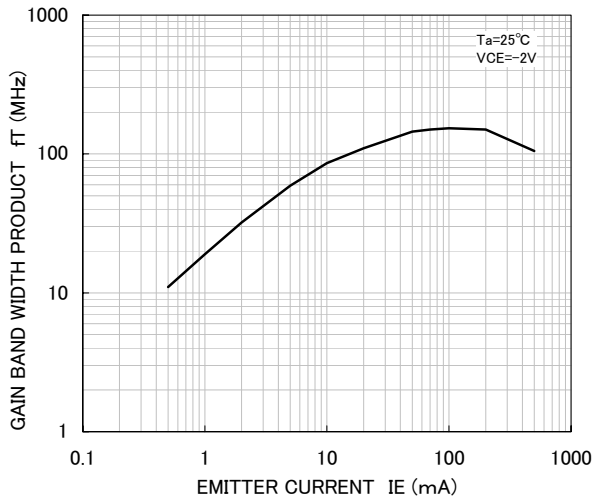
TYPICAL CHARACTERISTICS



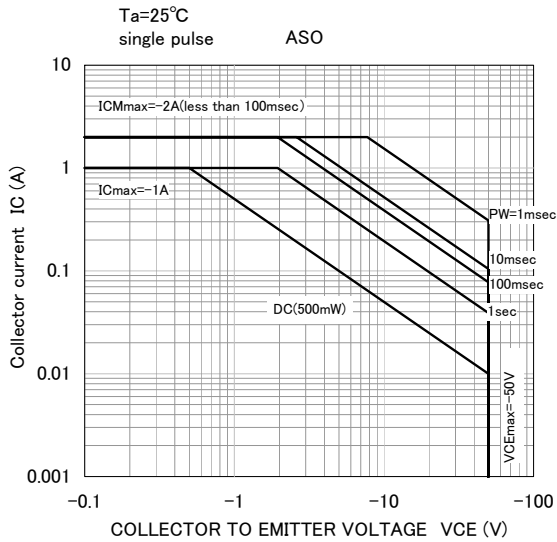
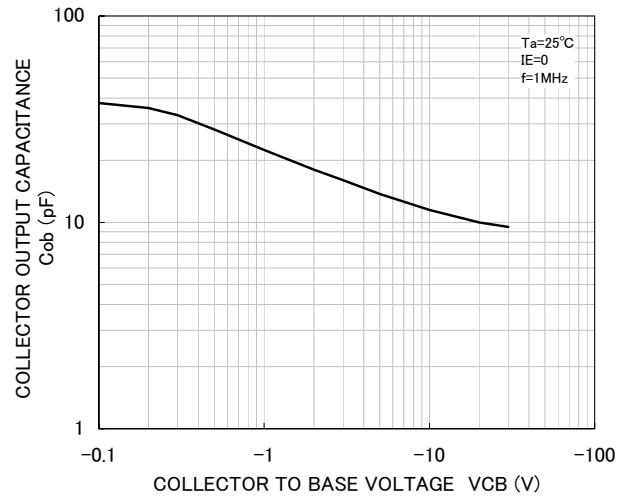
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GAIN BAND WIDTH PRODUCT
VS. EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE





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