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

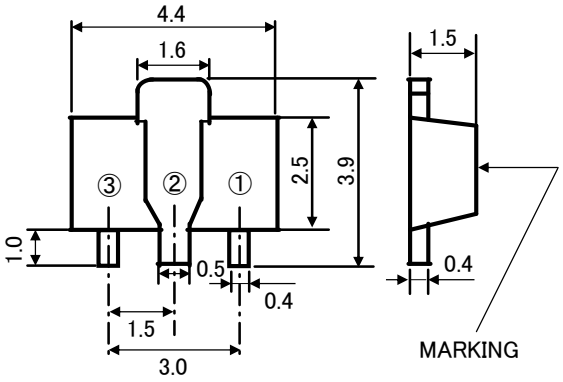
- Super mini package for easy mounting
- High voltage VCEO=−50V
- High collector current IC=−1A
- Low VCE(sat) VCE(sat)=−0.5Vmax(@IC=−500mA/IB=−50mA)
- High collector dissipation PC=500mW

APPLICATION

Relay drive, Power supply for audio equipment, VTR

OUTLINE DRAWING

Unit : mm

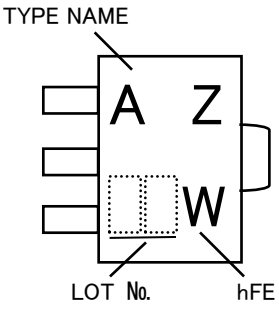


TERMINAL CONNECTOR

①: BASE
②: COLLECTOR
③: EMITTER

JEITA : SC−62
JEDEC : SOT−89

MARKING



MAXIMUM RATINGS (Ta=25℃)

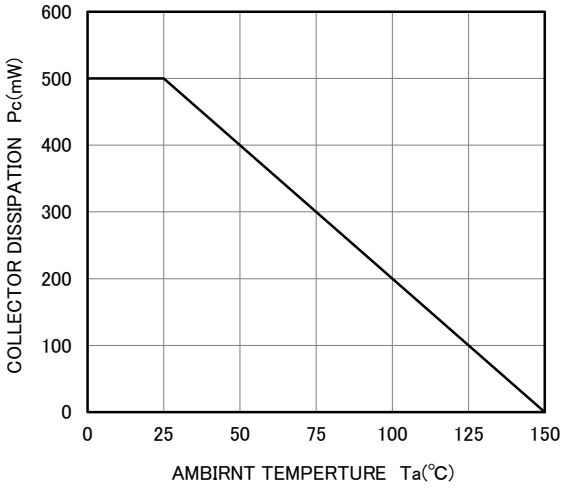
Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	−50	V
V_{EBO}	Emitter to Base voltage	−5	V
V_{CEO}	Collector to Emitter voltage	−50	V
I_C	Collector current	−1	A
I_{CM}	Peak collector current	−2	A
P_C	Collector dissipation	500	mW
T_j	Junction temperature	＋150	℃
T_{stg}	Storage temperature	−55～＋150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

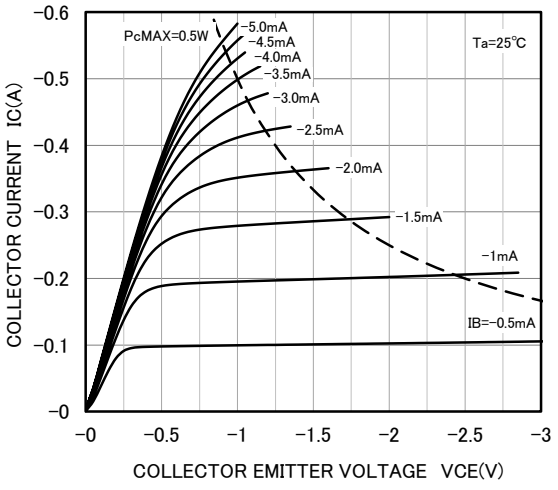
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B breakdown voltage	I_C=−10 μA, I_E=0mA	−50	−	−	V
$V_{(BR)EBO}$	E to B breakdown voltage	I_E=−10 μA, I_C=0mA	−5	−	−	V
$V_{(BR)CEO}$	C to E breakdown voltage	I_C=−1mA, R_{BE}=∞	−50	−	−	V
I_{CBO}	Collector cut off current	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
Cob	Collector output capacitance	V_{CB}=−10V, I_E=0mA, f=1MHz	−	12	−	pF

TYPICIAL CHARACTERISTICS

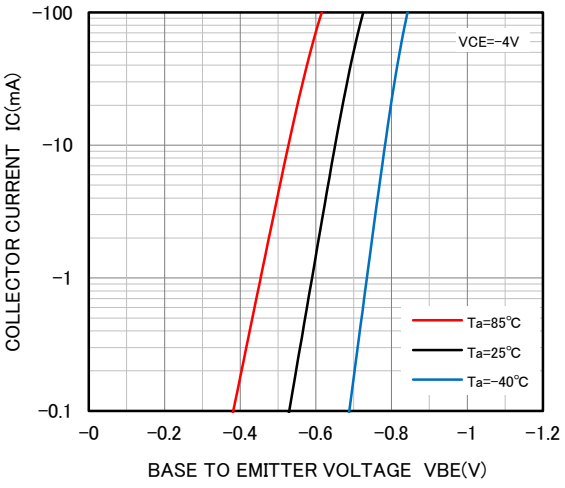
COLLECTOR DISSIPATION
VS. AMBIRNT TEMPERTURE



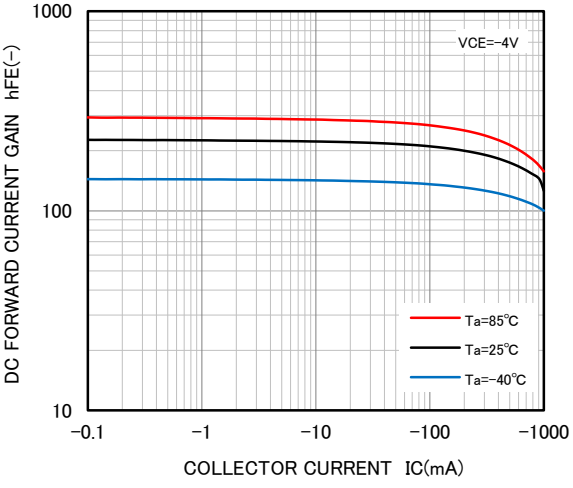
COMMON EMITTER OUTPUT



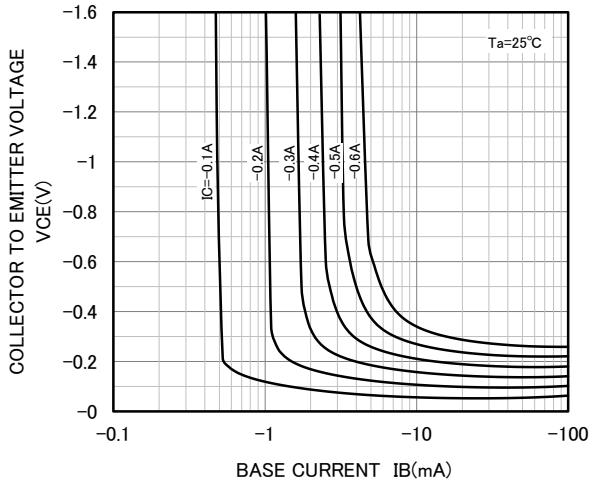
COMMON EMITTER TRANSFER



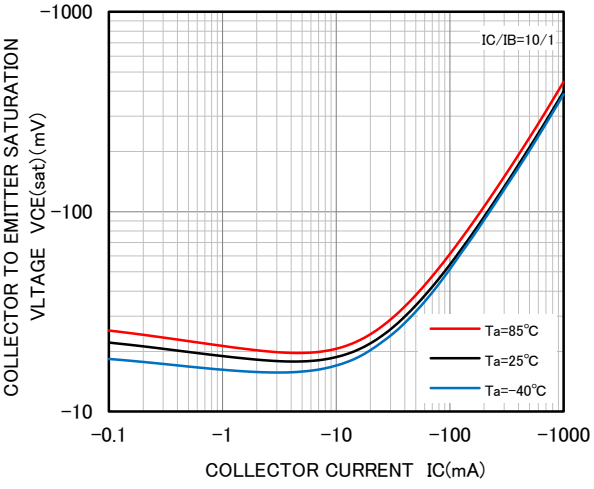
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



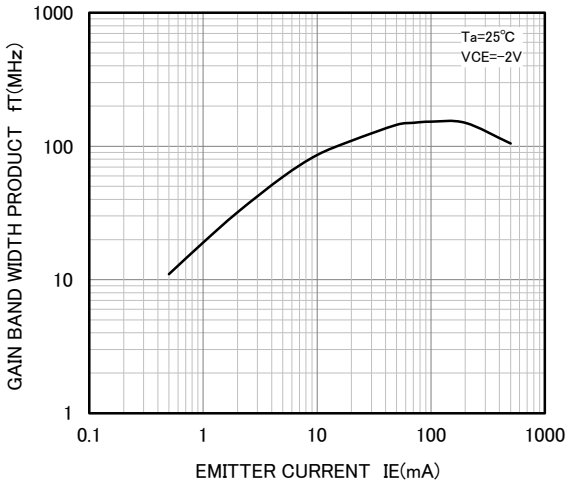
COLLECTOR TO EMITTER VOLTAGE
VS. BASE CURRENT



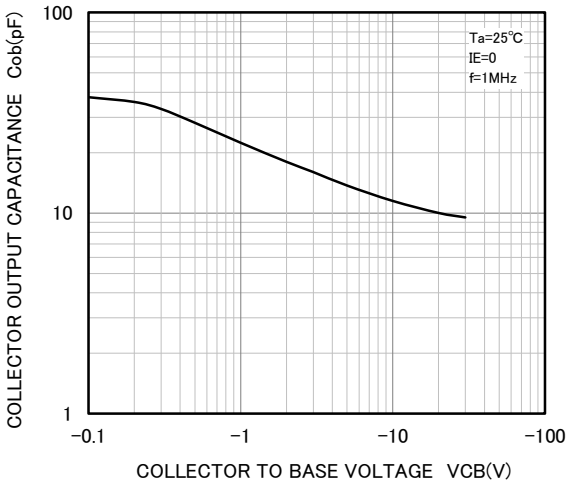
COLLECTOR TO EMITTER SATURATION VOLTAGE
VS.COLLECTOR CURRENT



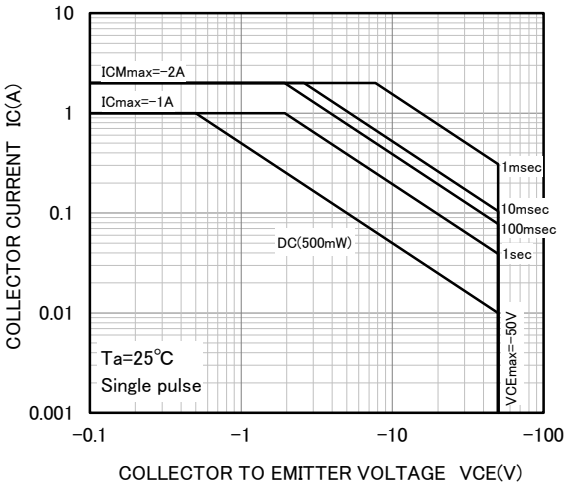
GAIN BAND WDTH PRODUCT
VS.EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE



ASO



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