

INA1001AC1-TH50

FOR GENERAL PURPOSE HIGH CURRENT DRIVE APPLICATION
SILICON PNP EPITAXIAL TYPE

AEC-Q101 Compliance

DESCRIPTION

INA1001AC1 is a silicon PNP epitaxial type transistor.
It is designed with high collector current and small $V_{CE(sat)}$.

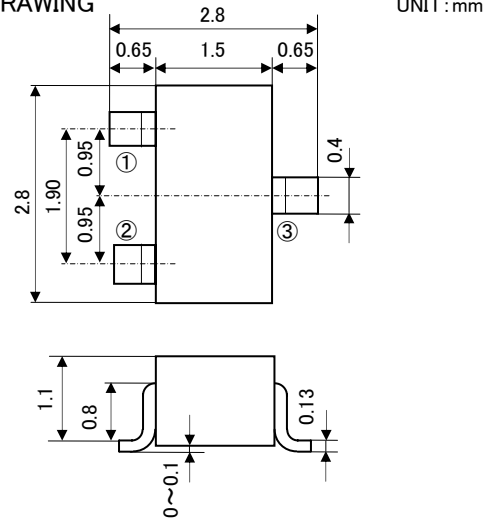
FEATURE

- Super mini package for easy mounting
- High collector current ($I_C = -500\text{mA}$)
- Low collector saturation voltage
($V_{CE(sat)} < -0.3V_{max}$; $I_C = -100\text{mA}$, $I_B = -10\text{mA}$)
- High voltage $V_{CEO} = -80\text{V}$

APPLICATION

Power supply, Relay drive

OUTLINE DRAWING



Terminal Connector

JEITA:SC-59

①: Base

JEDEC: Similar to TO-236

②: Emitter

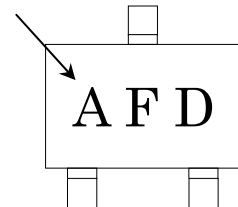
③: Collector

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

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	-80	V
V_{EBO}	Emitter to Base voltage	-4	V
V_{CEO}	Collector to Emitter voltage	-80	V
I_C	Collector current	-500	mA
P_C	Collector dissipation ($T_a = 25^\circ\text{C}$)	200	mW
T_j	Junction temperature	+150	$^\circ\text{C}$
T_{stg}	Storage temperature	-55 ~ +150	$^\circ\text{C}$

MARKING

Type Name



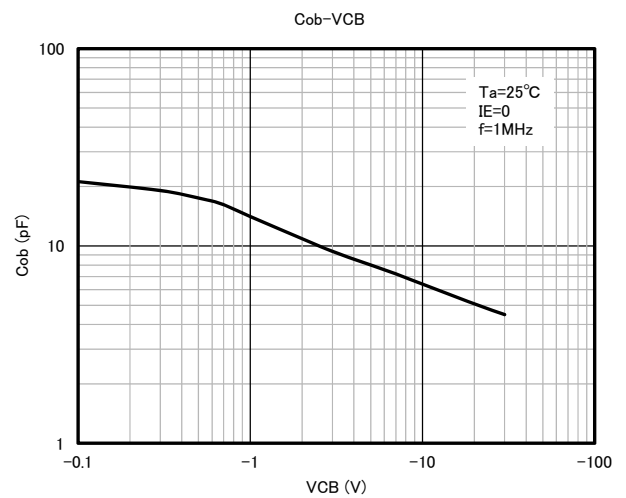
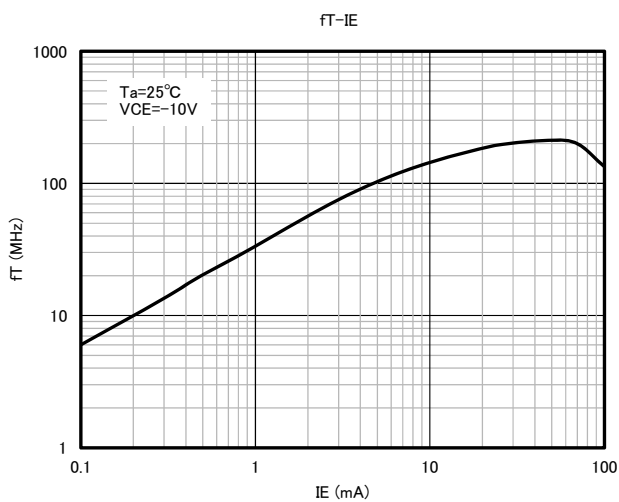
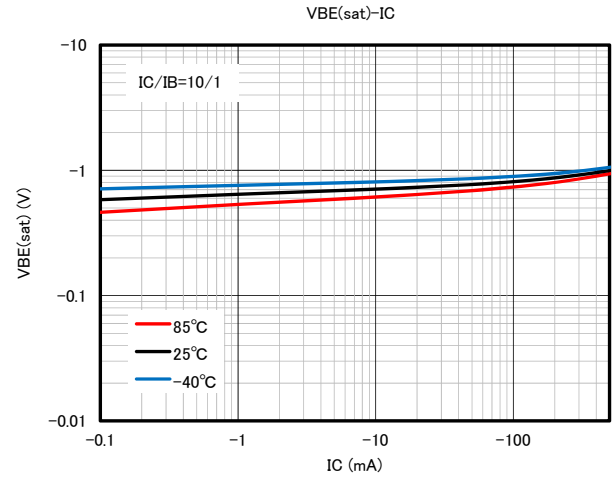
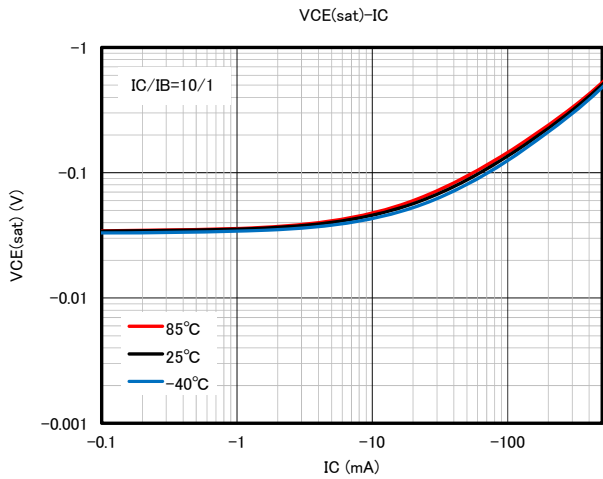
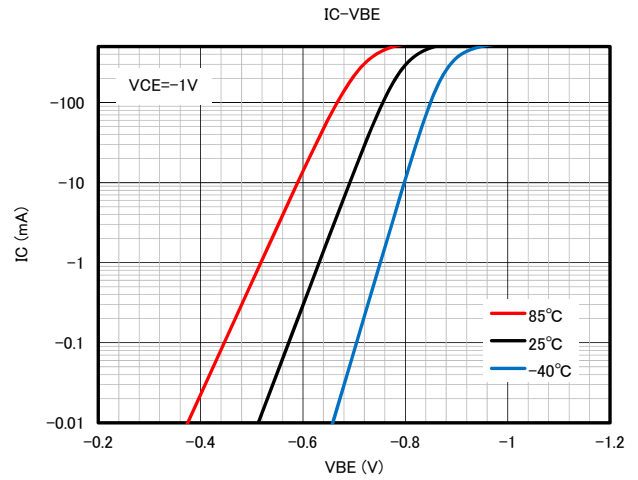
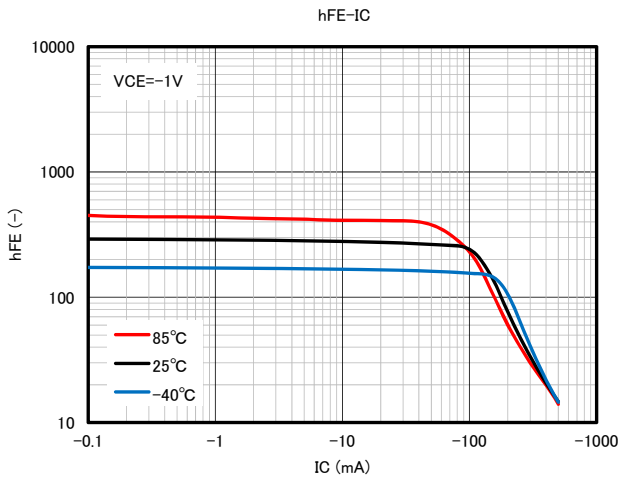
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B breakdown voltage	$I_C = -100\mu\text{A}$, $I_E = 0\text{mA}$	-80	-	-	V
$V_{(BR)EBO}$	E to B breakdown voltage	$I_E = -100\mu\text{A}$, $I_C = 0\text{mA}$	-4	-	-	V
$V_{(BR)CEO}$	C to E breakdown voltage	$I_C = -1\text{mA}$, $I_B = 0\text{mA}$	-80	-	-	V
I_{CBO}	Collector cut off current	$V_{CE} = -80\text{V}$, $I_E = 0\text{mA}$	-	-	-0.1	μA
I_{EBO}	Emitter cut off current	$V_{EB} = -4\text{V}$, $I_C = 0\text{mA}$	-	-	-0.1	μA
h_{FE1}	DC forward current gain1	$V_{CE} = -1\text{V}$, $I_C = -10\text{mA}$	95	-	-	-
h_{FE2}	DC forward current gain2	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$	95	-	-	-
$V_{CE(sat)}$	C to E saturation voltage	$I_C = -100\text{mA}$, $I_B = -10\text{mA}$	-	-	-0.3	V
f_T	Gain bandwidth product	$V_{CE} = -1\text{V}$, $I_E = 100\text{mA}$, $f = 100\text{MHz}$	50	-	-	MHz

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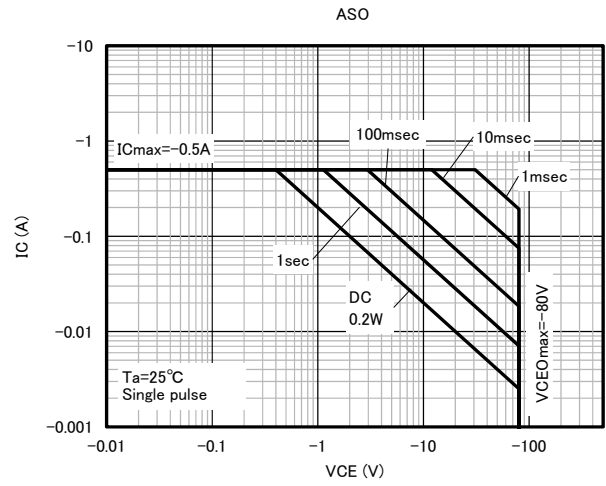
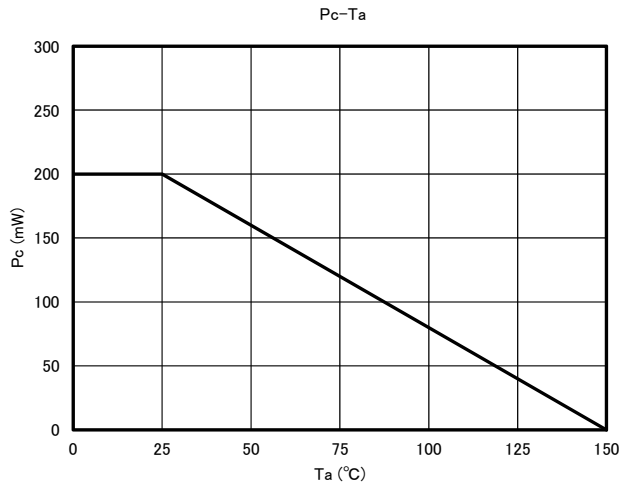
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TYPICAL CHARACTERISTICS



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