

PRELIMINARY

Notice: This is not a final specification
Some parametric are subject to change.

INA1001AC1

FOR GENERAL PURPOSE HIGH CURRENT DRIVE APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

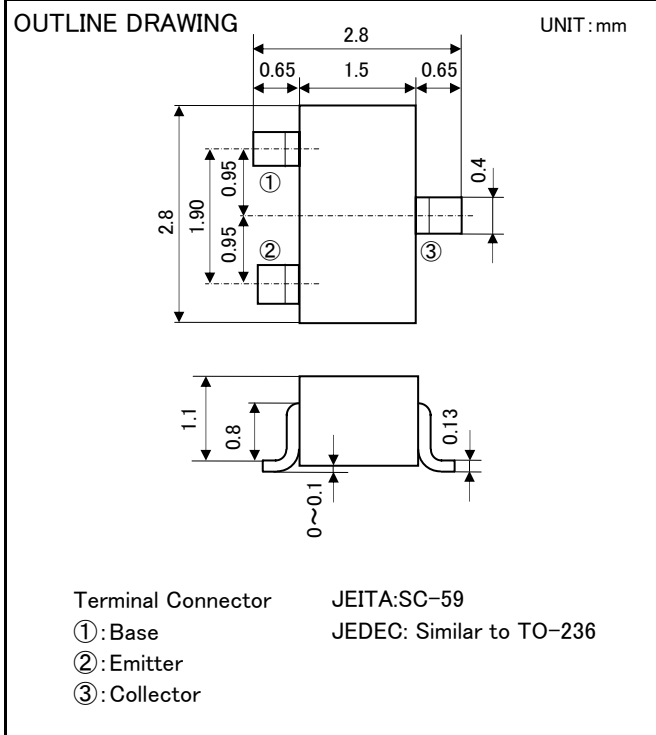
INA1001AC1 is a silicon PNP epitaxial type transistor.
It is designed with high collector current and small $V_{CE(sat)}$.

FEATURE

- Super mini package for easy mounting
- High collector current ($I_C = -500\text{mA}$)
- Low collector saturation voltage
($V_{CE(sat)} < -0.25V_{max}; I_C = -100\text{mA}, I_B = -10\text{mA}$)
- High voltage $V_{CEO} = -80\text{V}$ (Type)

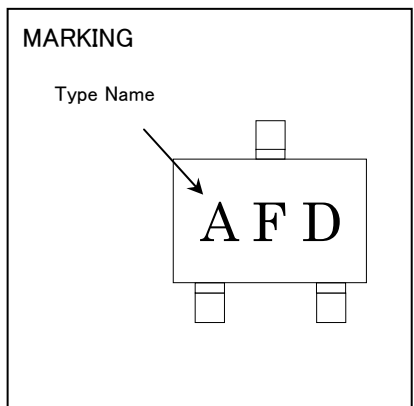
APPLICATION

Power supply, Relay drive



MAXIMUM RATING (Ta=25°C)

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



ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -1\text{mA}, I_B = 0\text{mA}$	-80	-	-	V
$V_{(BR)CBO}$	C to B break down voltage	$I_C = -100\mu\text{A}, I_E = 0\text{mA}$	-80	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E = -100\mu\text{A}, I_C = 0\text{mA}$	-4	-	-	V
I_{CBO}	Collector cut off current	$V_{CB} = -80\text{V}, I_E = 0\text{mA}$	-	-	-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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