

2SA1096, 2SA1096A

Silicon PNP Epitaxial Planar Type

AF Power Amplifier

Complementary Pair with 2SC2497, 2SC2497A

Features

- 5W output in complementary pair with 2SC2497, 2SC2497A
- TO-126 package, no insulator needed when fixing to a heat sink

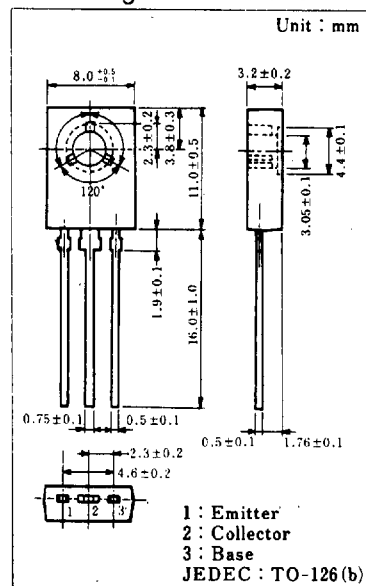
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
Collector-base voltage	V_{CB0}	-70	V
Collector-emitter voltage	2SA1096	-50	V
	2SA1096A	-60	V
Emitter-base voltage	V_{EB0}	-5	V
Peak collector current	I_{CP}	-3	A
Collector current	I_C	-2	A
Collector power dissipation	P_C	1.2 ^{*1}	W
		5 ^{*2}	
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C

*1 Without heat sink

*2 With a 100×100×2 mm Al heat sink

Package Dimensions



Electrical Characteristics (Tc=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CB0}	$V_{CB} = -20\text{ V}, I_E = 0$			-1	μA
	I_{CE0}	$V_{CE} = -10\text{ V}, I_B = 0$			-100	
Emitter cutoff current	I_{EB0}	$V_{EB} = -5\text{ V}, I_C = 0$			-10	μA
Collector-base voltage	V_{CB0}	$I_C = -1\text{ mA}, I_E = 0$	-70			V
Collector-emitter voltage	2SA1096	$I_C = -2\text{ mA}, I_B = 0$	-50			V
	2SA1096A		-60			
DC current gain	h_{FE}^*	$V_{CE} = -5\text{ V}, I_C = -1\text{ A}$	80		220	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1.5\text{ A}, I_B = -0.15\text{ A}$			-1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1.5\text{ A}, I_B = -0.15\text{ A}$			-1.5	V
Transition frequency	f_T	$V_{CB} = -5\text{ V}, I_E = 0.5\text{ A}, f = 200\text{ MHz}$		150		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -20\text{ V}, I_E = 0, f = 1\text{ MHz}$		55		pF

* h_{FE} Classifications

Class	Q	R
h_{FE}	80 ~ 160	120 ~ 220

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