

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

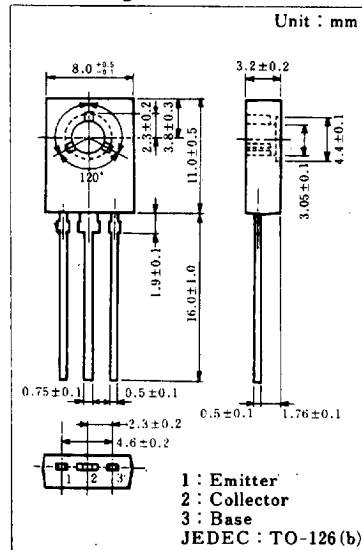
■ Absolute Maximum Ratings (Ta=25°C)

Item		Symbol	Value	Unit
Collector-base voltage		V_{CBO}	-70	V
Collector-emitter voltage	2SA1096	V_{CEO}	-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_{stR}	-55 ~ +150	°C

* Without heat sink

*² With a 100×100×2 mm Al heat sink

■ Package Dimensions



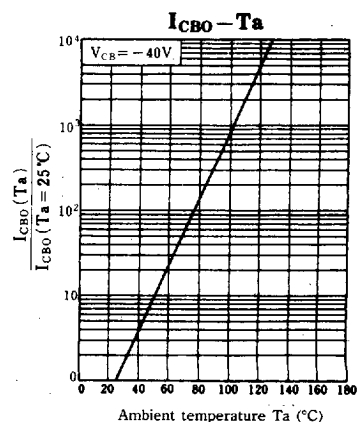
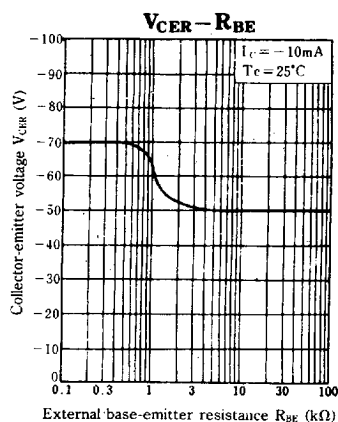
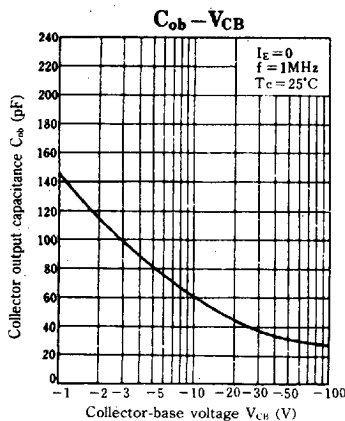
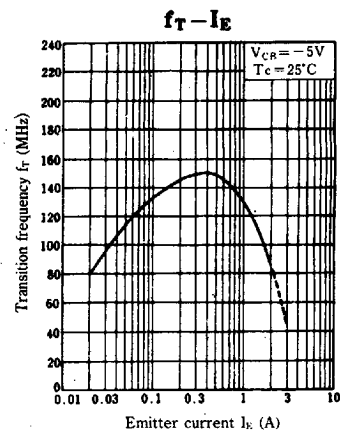
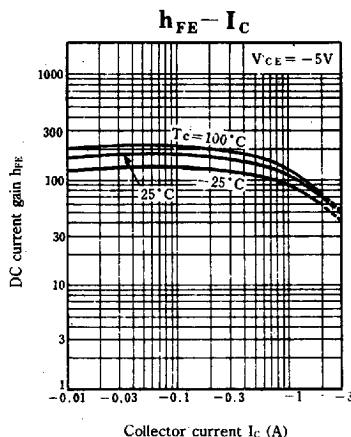
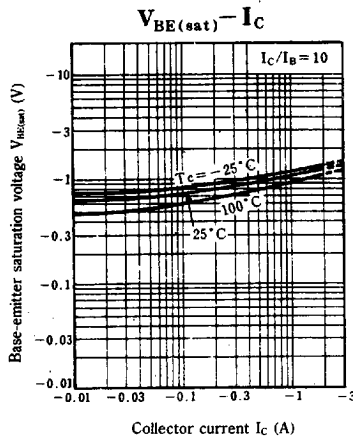
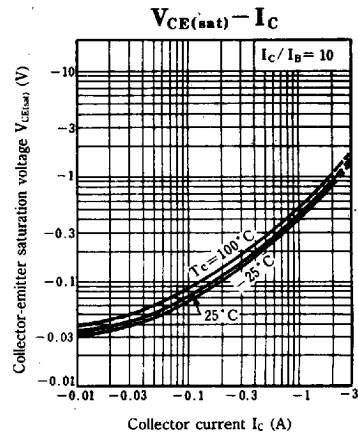
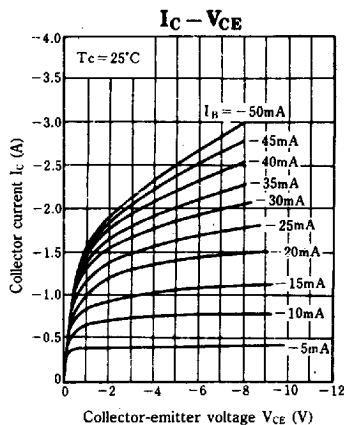
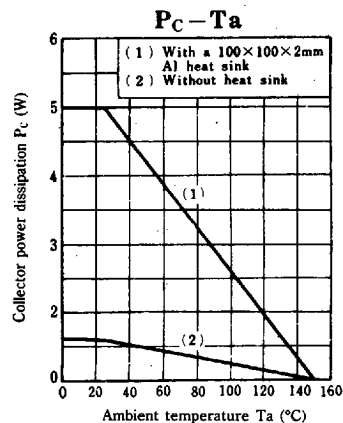
■ Electrical Characteristics (Tc=25°C)

Item		Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current		I_{CBO}	$V_{CB} = -20\text{ V}, I_E = 0$			-1	μA
		I_{CEO}	$V_{CE} = -10\text{ V}, I_B = 0$			-100	
Emitter cutoff current		I_{EBO}	$V_{EB} = -5\text{ V}, I_C = 0$			-10	μA
Collector-base voltage		V_{CBO}	$I_C = -1\text{ mA}, I_E = 0$	-70			V
Collector-emitter voltage	2SA1096	V_{CEO}	$I_C = -2\text{ mA}, I_B = 0$	-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

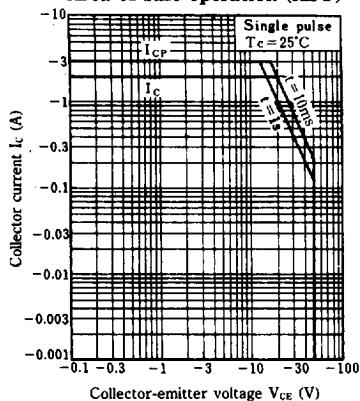
*h_{FE} Classifications

Class	Q	R
h _{FE}	80~160	120~220

6932852 0016115 68T



Area of safe operation (ASO)



6932852 0016117 452

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Panasonic