

2SA886

Silicon PNP Epitaxial Planar Type

AF Power Amplifier

Complementary Pair with 2SC1847

■ Features

- 4W output in complementary pair with 2SC1847
- 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}	-50	V
Collector-emitter voltage	V_{CE0}	-40	V
Emitter-base voltage	V_{EB0}	-5	V
Peak collector current	I_{CP}	-3	A
Collector current	I_C	-1.5	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

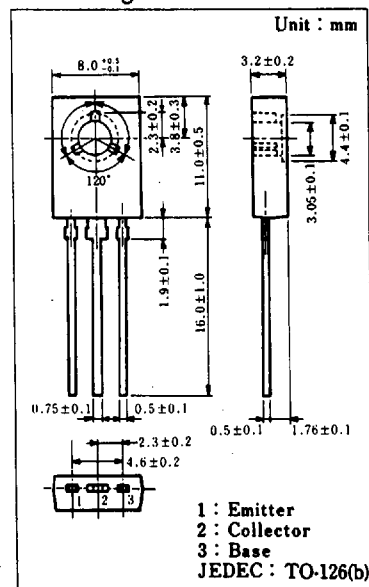
■ Electrical Characteristics (Tc=25°C)

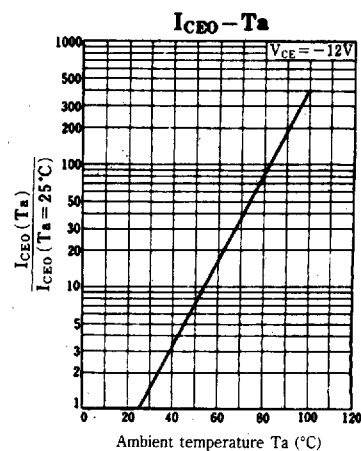
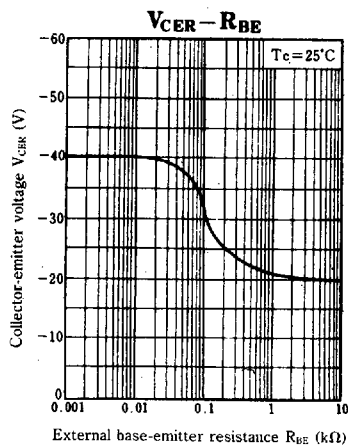
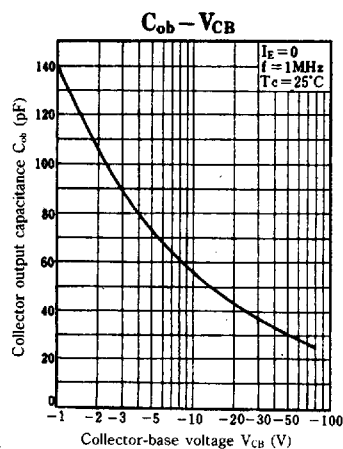
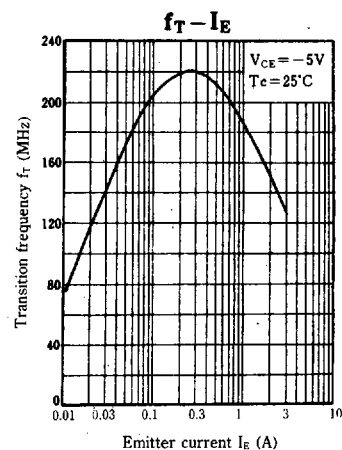
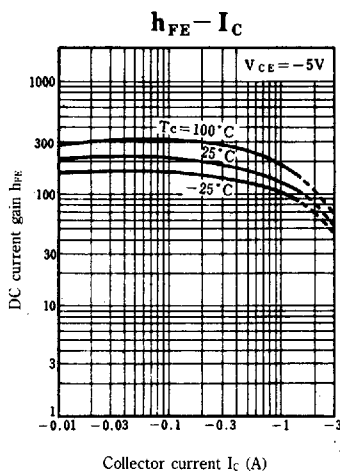
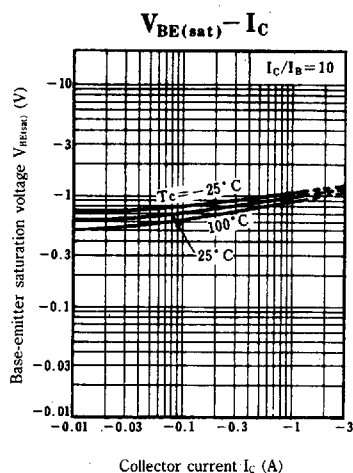
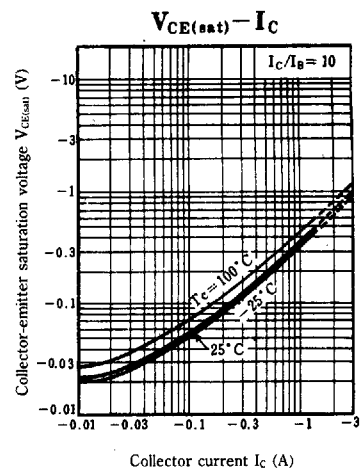
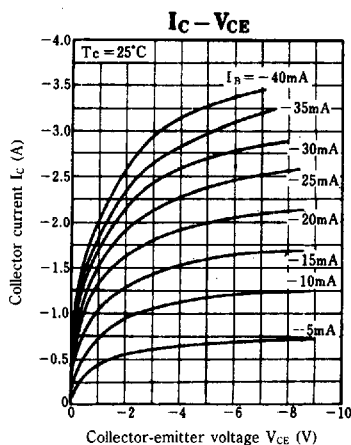
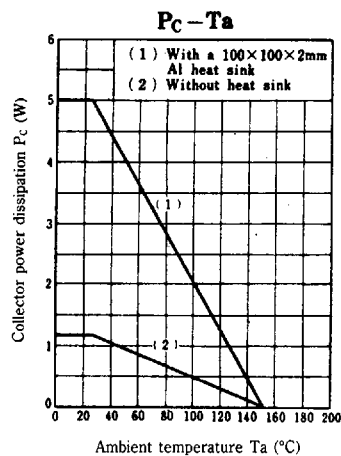
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -20 \text{ V}, I_E = 0$			-1	μA
	I_{CEO}	$V_{CE} = -10 \text{ V}, I_B = 0$			-100	
Emitter cutoff current	I_{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$			-10	μA
Collector-base voltage	V_{CB0}	$I_C = -1 \text{ mA}, I_E = 0$	-50			V
Collector-emitter voltage	V_{CE0}	$I_C = -2 \text{ mA}, I_B = 0$	-40			V
DC current gain	h_{FE}^*	$V_{CE} = -5 \text{ V}, I_C = -1 \text{ A}$	50	120	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	$V_{BE(sat)}$	$I_C = -2 \text{ A}, I_B = -0.2 \text{ A}$			-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}	$V_{CB} = -20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		45		pF

* h_{FE} Classifications

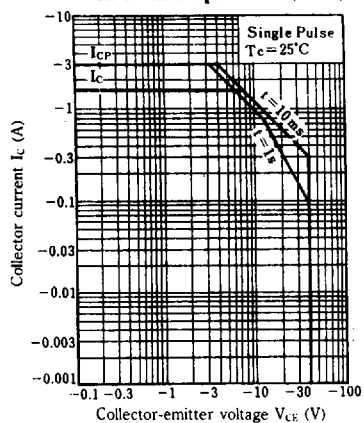
Class	P	Q	R
h_{FE}	50 ~ 100	80 ~ 160	120 ~ 220

■ Package Dimensions





Area of safe operation (ASO)

 $R_{th}(t) - t$ 