KODENSHI AUK

STA8550SF

PNP Silicon Transistor

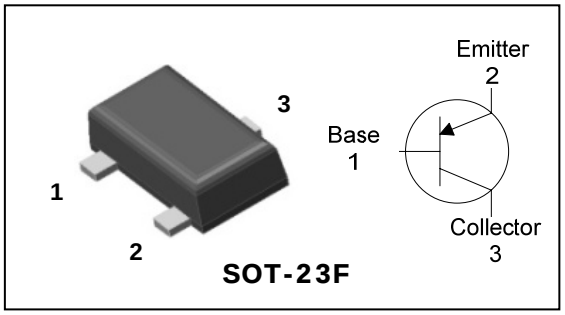
Descriptions

- High current application
- Radio in class B push-pull operation

Feature

- Complementary pair with STC8050SF

PIN Connection



Ordering Information

Type NO.	Marking	Package Code
STA8550SF	8B □ □ (① ② ③)	SOT-23F

①Device Code ②hFE Rank ③Year&Week Code

Absolute Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-30	V
Collector-emitter voltage	V_{CEO}	-25	V
Emitter-base voltage	V_{EBO}	-6	V
Collector current	I_C	-800	mA
Collector power dissipation	P_C*	350	mW
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55~150	°C

* : Package mounted on 99.5% Alumina 10×8×0.6mm

Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-emitter breakdown voltage	BV_{CEO}	I_C=-1mA, I_B=0	-25	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=-30V, I_E=0	-	-	-50	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-6V, I_C=0	-	-	-50	nA
DC current gain	h_{FE}*	V_{CE}=-1V, I_C=-50mA	85	-	300	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA	-	-	-0.5	V
Base-emitter voltage	V_{BE}	V_{CE}=-1V, I_C=-500mA	-	-0.85	-1.2	V
Transition frequency	f_T	V_{CE}=-5V, I_C=-10mA	-	200	-	MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	19	-	pF

* : h_{FE} Rank / B : 85~160, C : 120~200, D : 160~300

Electrical Characteristic Curves

Fig. 1 Pc - Ta

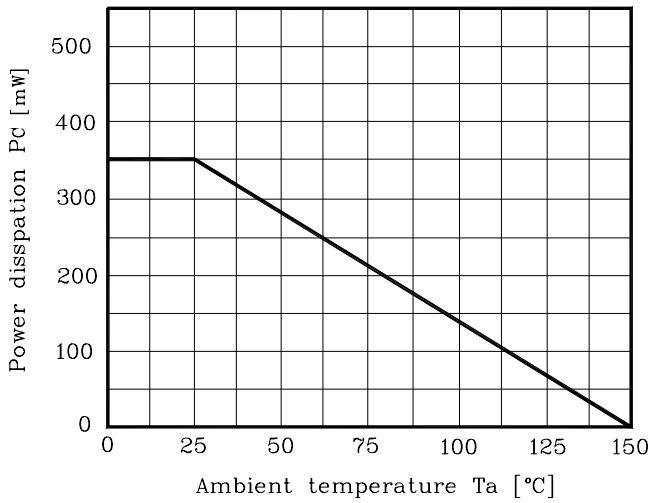


Fig. 2 I_C - V_{BE}

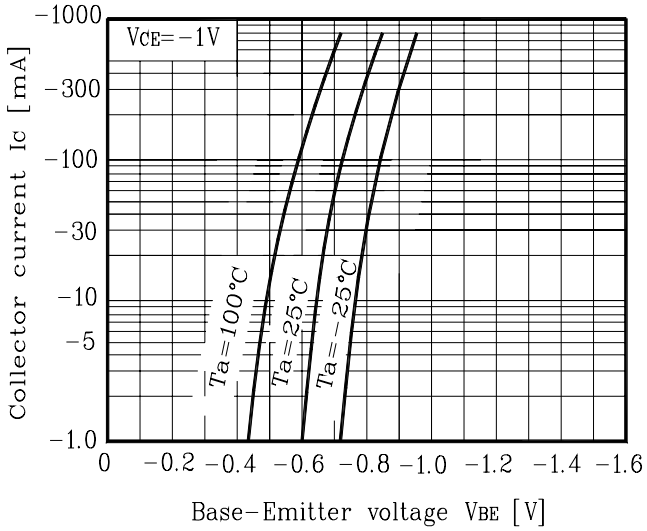


Fig. 3 I_C - V_{CE}

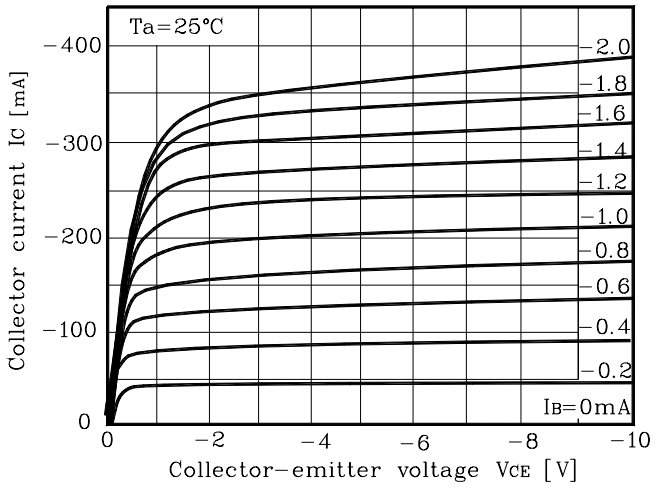


Fig. 4 $V_{CE(SAT)}$ - I_C

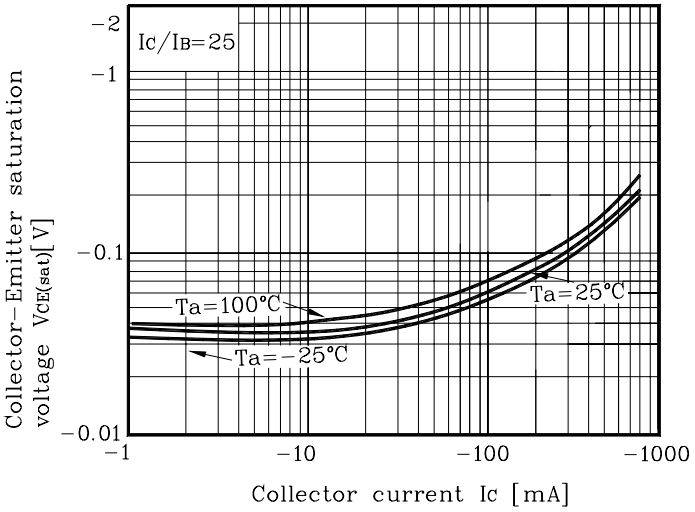


Fig. 5 h_{FE} - I_C

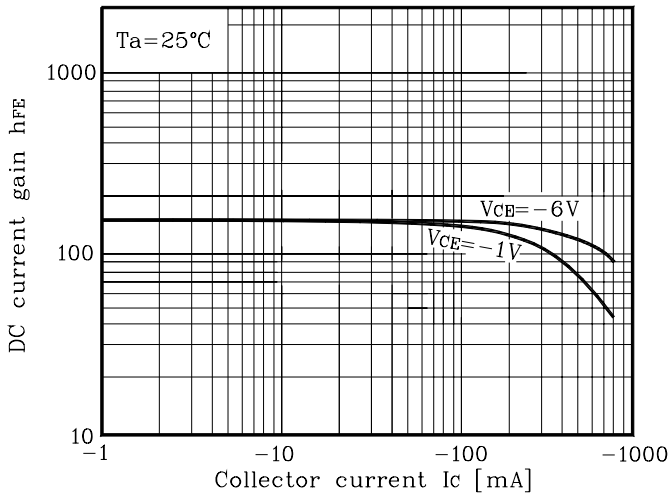
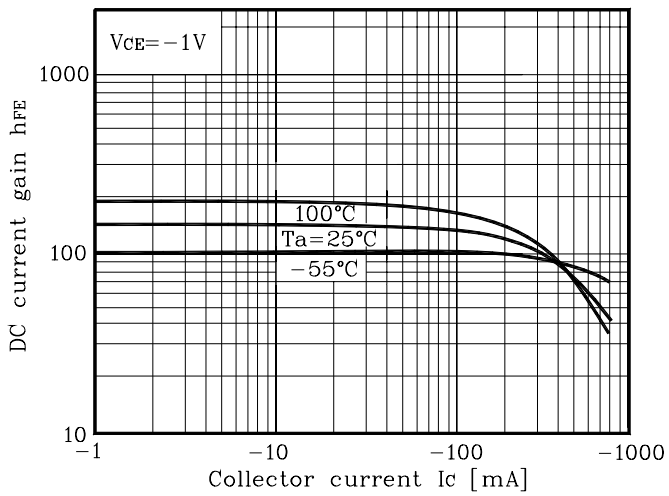
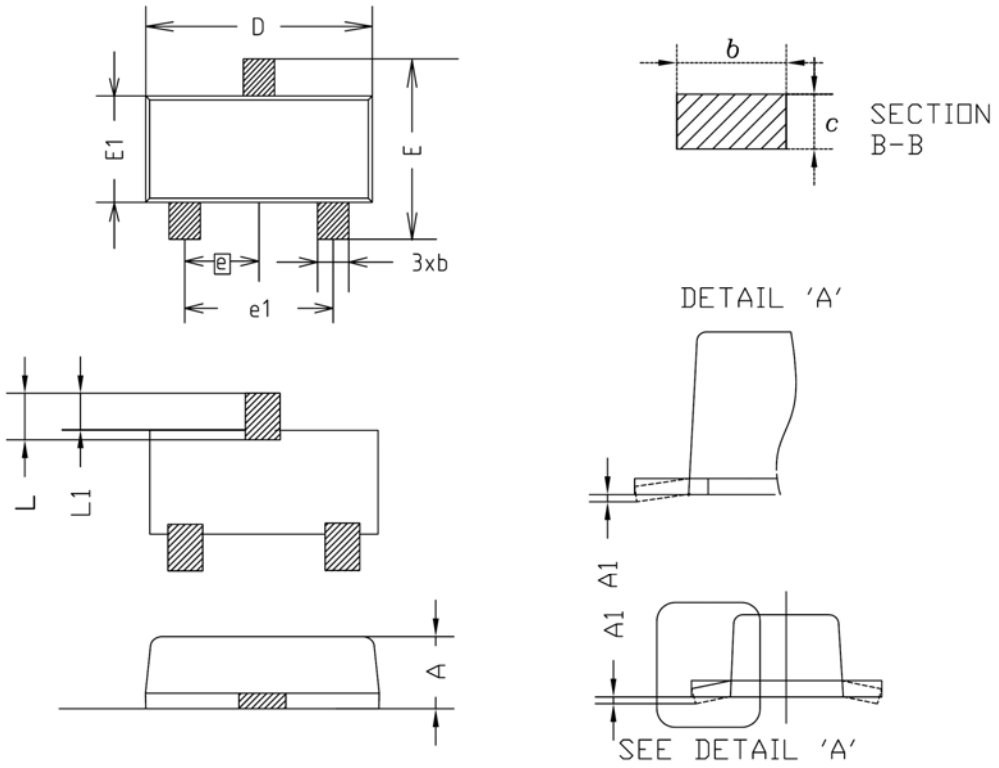


Fig. 6 h_{FE} - I_C

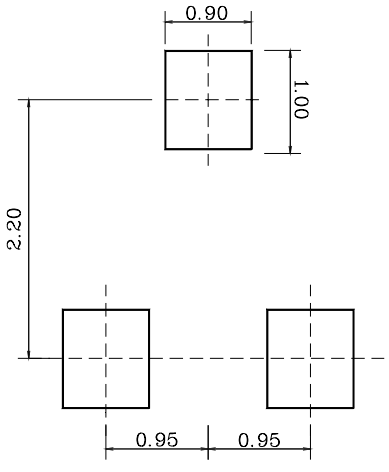


Outline Dimension



SYMBOL	MILLIMETER(mm)			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	0.80	0.90	1.00	
A1	0.00	–	0.10	
b	0.35	0.40	0.45	
c	0.10	0.15	0.20	
D	2.80	2.90	3.00	
E	2.30	2.40	2.50	
E1	1.50	1.60	1.70	
e	0.95BSC			
e1	1.80	1.90	2.00	
L	0.48	0.58	0.68	
L1	0.30	–	0.50	

※Recommend PCB solder land [Unit: mm]



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