KODENSHI AUK

2SC5343SF

NPN Silicon Transistor

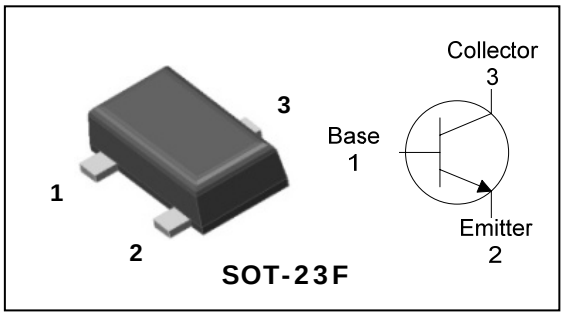
Description

- General small signal amplifier

Features

- Low collector saturation voltage : V_{CE}= 0.25V(Max.)
- Low output capacitance : C_{ob}= 2pF(Typ.)
- Complementary pair with 2SA1980SF

PIN Connection



Ordering Information

Type NO.	Marking	Package Code
2SC5343SF	DA □ □ (① ② ③)	SOT-23F

① Device Code ② hFE Rank ③ Year&Week Code

Absolute maximum ratings

Ta=25°C

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	60	V
Collector-Emitter voltage	V_{CEO}	50	V
Emitter-Base voltage	V_{EBO}	5	V
Collector current	I_C	150	mA
Collector dissipation	P_C	200	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55~150	°C

Electrical Characteristics

Ta=25°C

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	BV_{CBO}	I_C= 100μA, I_E= 0	60	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C= 1mA, I_B= 0	50	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E= 10μA, I_C= 0	5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}= 60V, I_E= 0	-	-	0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V, I_C= 0	-	-	0.1	μA
DC current gain	h_{FE}^*	V_{CE}= 6V, I_C= 2mA	70	-	700	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C= 100mA, I_B= 10mA	-	-	0.25	V
Transistion frequency	f_T	V_{CE}= 10V, I_C= 1mA	80	-	-	MHz
Collector output capacitance	C_{ob}	V_{CB}= 10V, I_E= 0, f= 1MHz	-	2	3.5	pF
Noise figure	NF	V_{CE}= 6V, I_C= 0.1mA, f= 1KHz, Rg= 10KΩ	-	-	10	dB

* : h_{FE} rank / O : 70 ~ 140, Y : 120 ~ 240, G : 200 ~ 400, L : 300 ~ 700

Electrical Characteristic Curves

Fig. 1 P_C –T_a

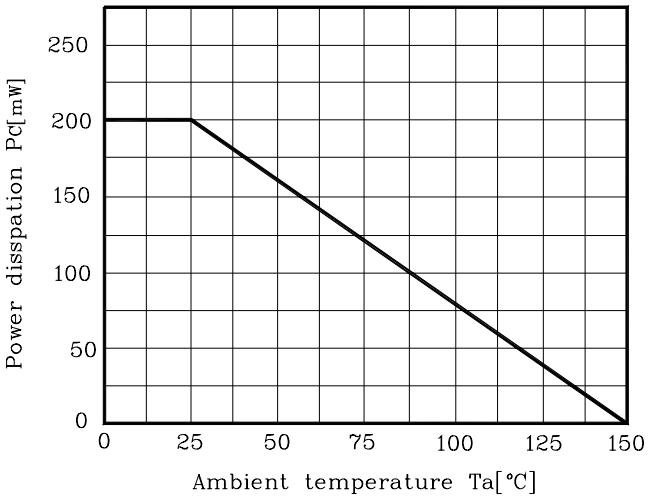


Fig. 2 I_C -V_{BE}

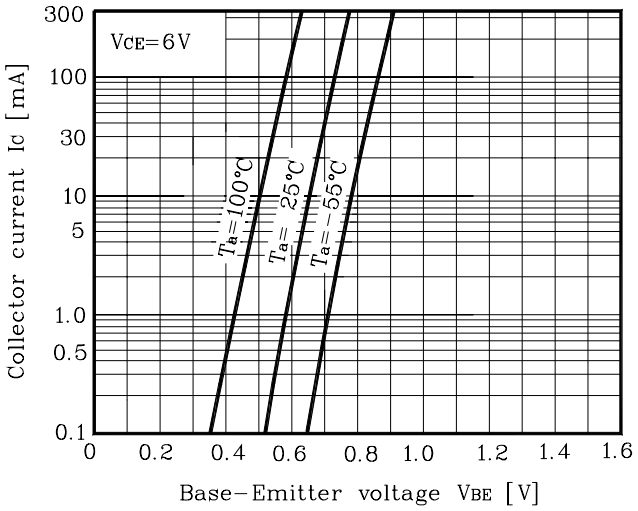


Fig. 3 I_C -V_{CE}

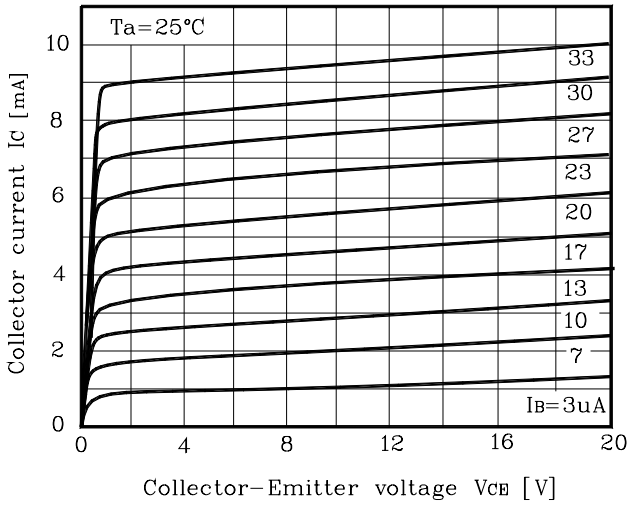


Fig. 4 h_{FE} -I_C

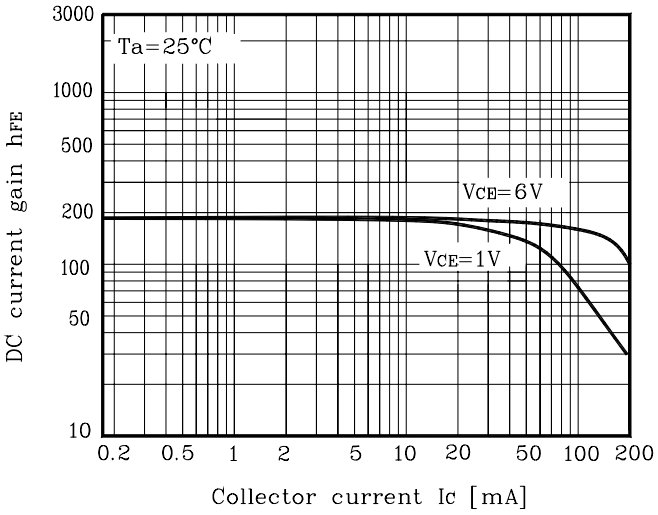
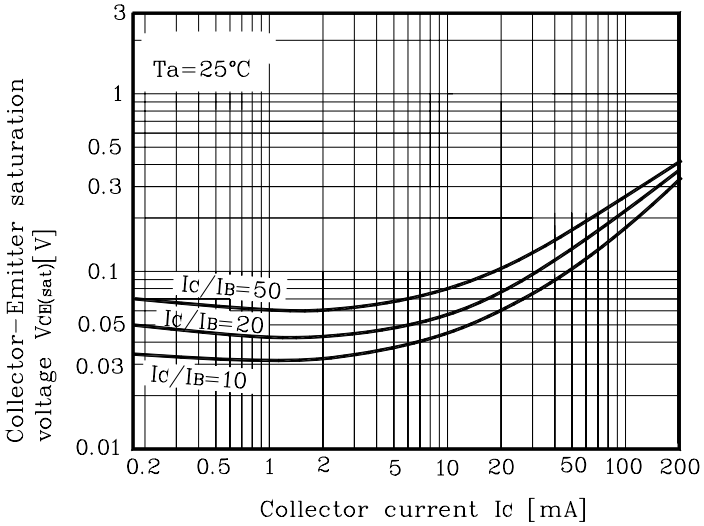
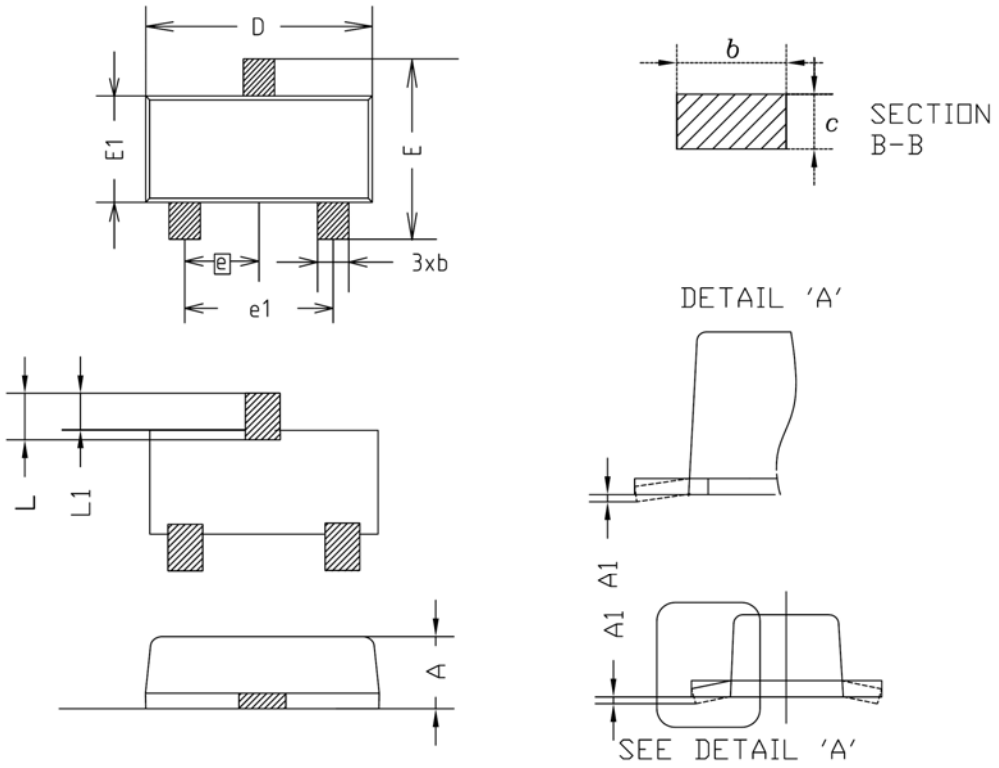


Fig. 5 $V_{CE(sat)}$ -I_C

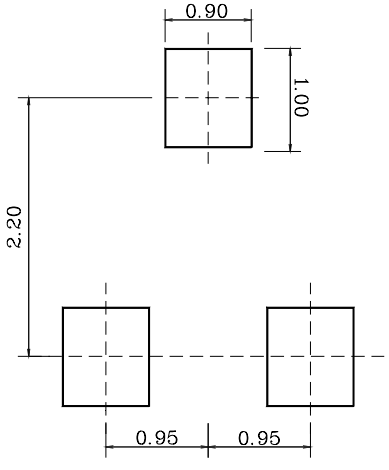


Outline Dimension



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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