KODENSHI AUK

KC5343S

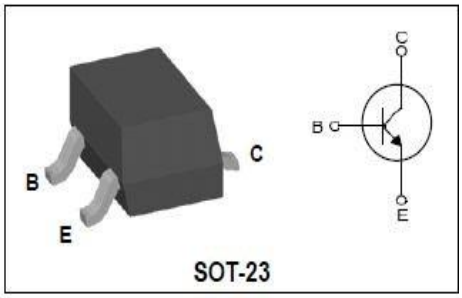
NPN Silicon Transistor

GENERAL SMALL SIGNAL AMPLIFIE

Features

- Low collector saturation voltage : V_{CE}=0.25V(Max.)
- Low output capacitance: C_{ob}=2pF(Typ.)
- Complementary pair with KA1980S

PIN Connection



Ordering Information

Type NO.	Marking	Package Code
KC5343S	DA □ □ • ① ② ③	SOT-23

①Device Code ②HFE Rank ③Year& Week Code •Dalian

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	350	mW
Junction temperature	T_j	150	°C
Storage temperature range	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=100uA, I_E=0	60	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=1mA, I_B=0	50	-	-	V
Collector-Emitter breakdown voltage	BV_{EBO}	I_E=10uA, I_C=0	5	-	-	
Collector cut-off current	I_{CEO}	V_{CE}=50V, I_B=0	-	-	0.6	μA
	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
Transition 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	-	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 – Ta

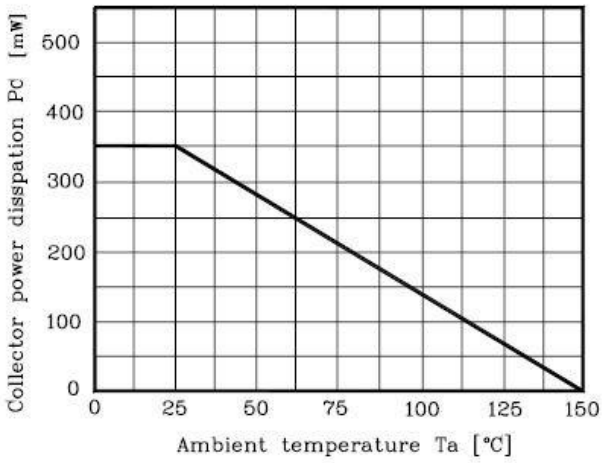


Fig. 2 I_C - V_{BE}

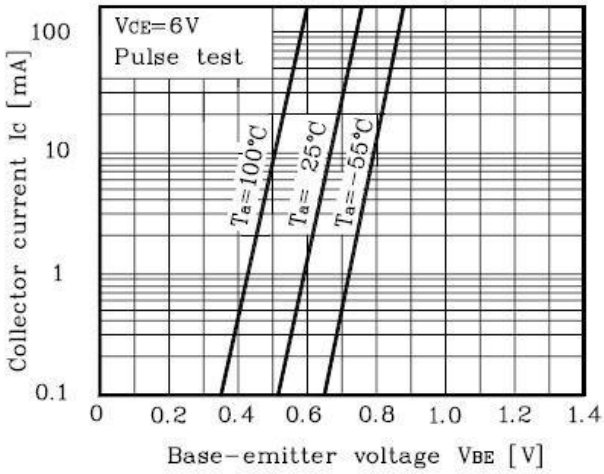


Fig. 3 I_C - V_{CE}

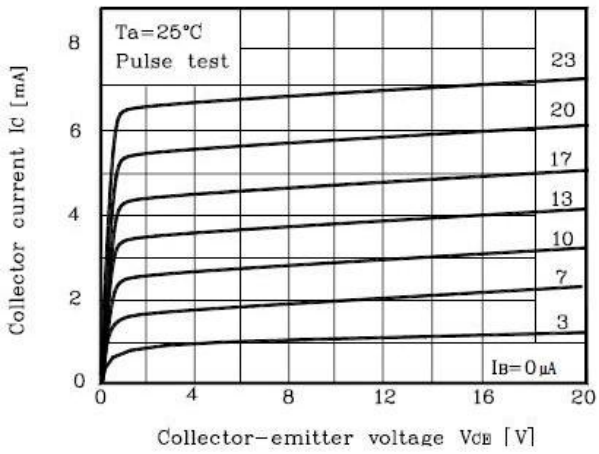


Fig. 4 h_{FE} - I_C

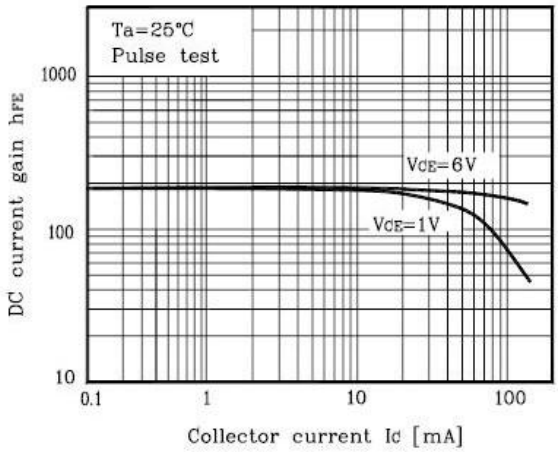


Fig. 5 $V_{CE(sat)}$ - I_C

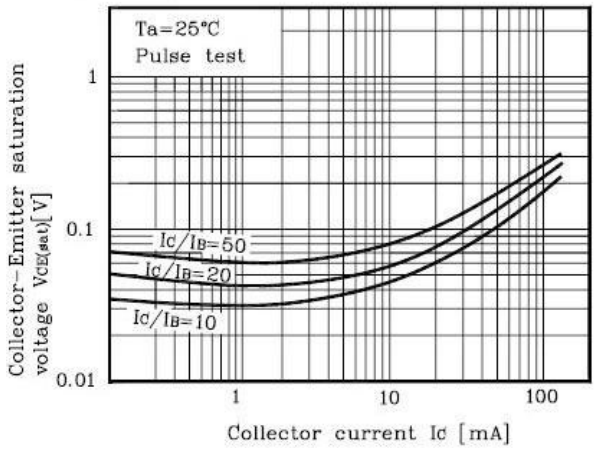
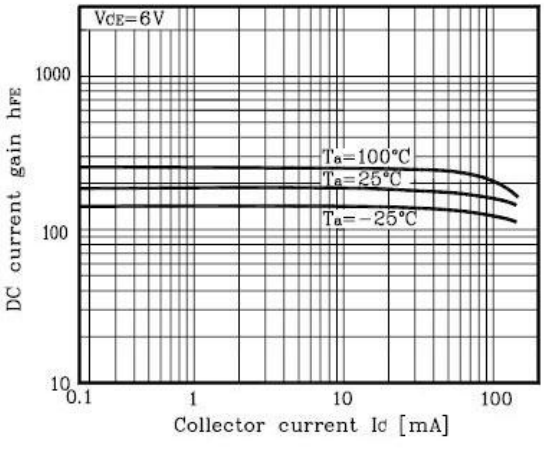
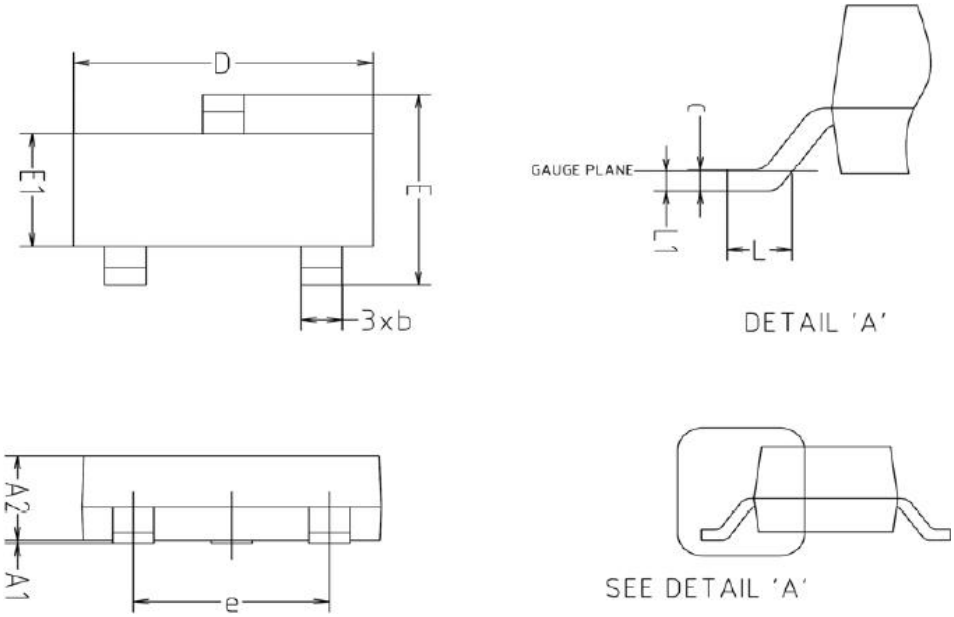


Fig. 6 h_{FE} - I_C

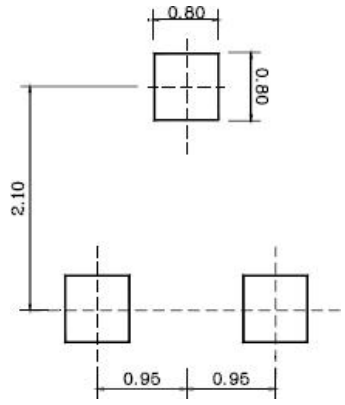


Outline Dimension



SYMBOL	MILLIMETERS			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A1	0.00	-	0.10	
A2	0.82	-	1.02	
b	0.39	0.42	0.45	
c	0.09	0.12	0.15	
D	2.80	2.90	3.00	
E	2.20	2.40	2.60	
E1	1.20	1.30	1.40	
e	1.90BSC			
L	0.20	-	-	
L1	0.12BSC			

※Recommend PCB solder land [Unit: mm]



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