KODENSHI AUK

KC5344S

NPN Silicon Transistor

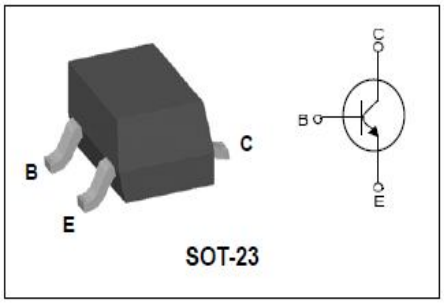
Description

- Audio power amplifier application

Features

- High h_{FE} : h_{FE}=100~320
- Complementary pair with KA1981S

PIN Connection



Ordering Information

Type NO.	Marking	Package Code
KC5344S	FA □ □• 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}	30	V
Collector-Emitter voltage	V_{CEO}	35	V
Emitter-Base voltage	V_{EBO}	5	V
Collector current	I_C	800	mA
Collector dissipation	PC*	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-Base breakdown voltage	BV_{CBO}	I_C=100μA, I_E=0	35	-	-	V
Collector Emitter breakdown voltage	BV_{CEO}	I_C=1mA, I_B=0	30	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=10μA, I_C=0	5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=35V, 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}=1V, I_C=100mA	100	-	320	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA, I_B=50mA	-	-	0.5	V
Transition frequency	f_T	V_{CE}=5V, I_C=10mA	-	120	-	MHz
Collector output capacitance	C_{ob}	V_{CB}=10V, I_E=0,f=1MHz	-120	13	-	pF

* : hFE rank / O : 100 ~ 200, Y : 160 ~ 320

Electrical Characteristic Curves

Fig. 1 P_C - T_a

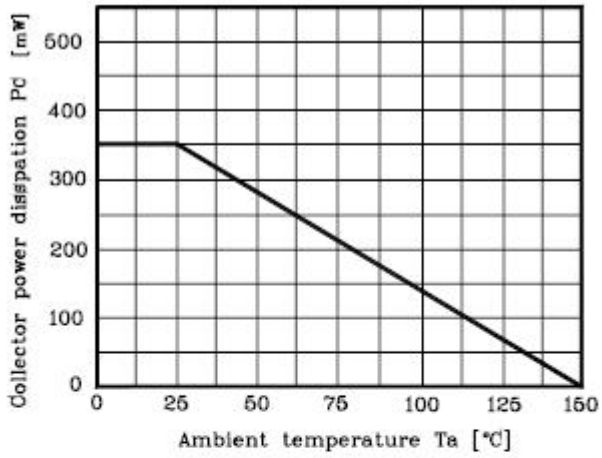


Fig. 2 I_C - V_{BE}

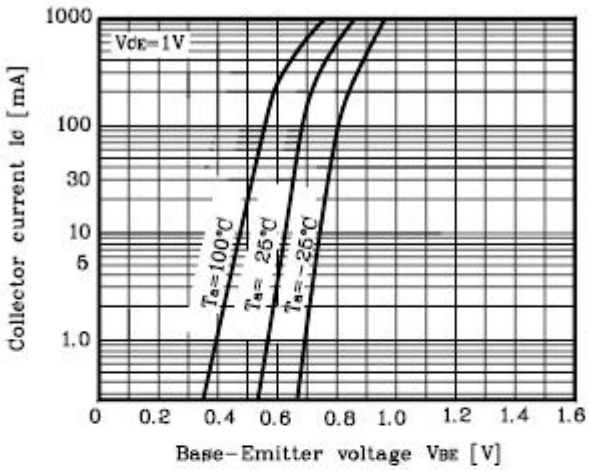


Fig. 3 I_C - V_{CE}

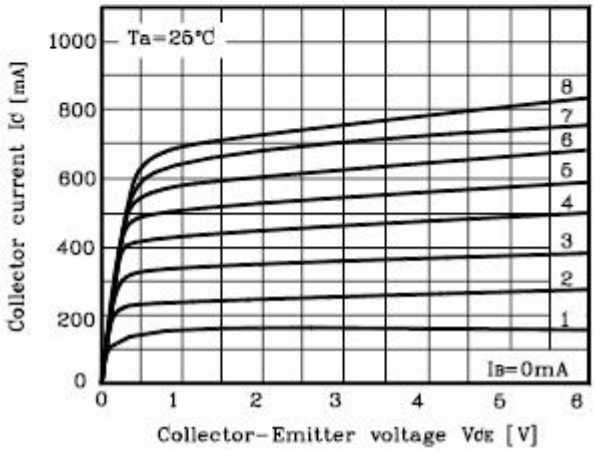


Fig. 4 $V_{CE(sat)}$ - I_C

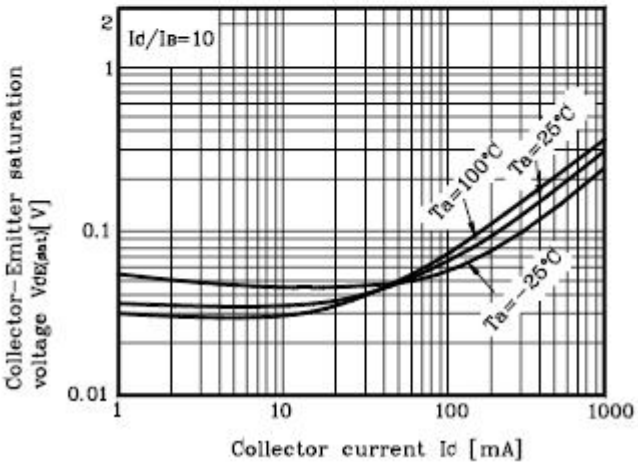
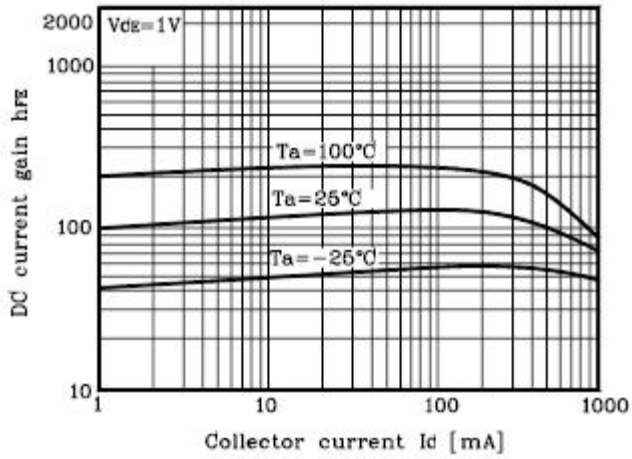
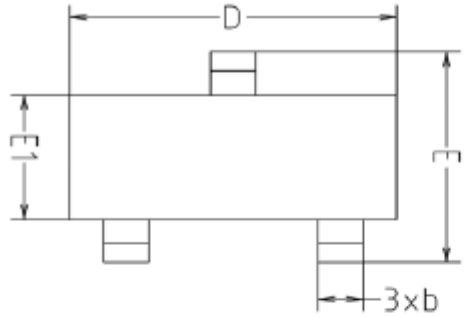
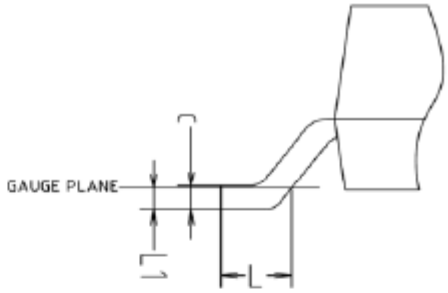


Fig. 5 h_{FE} - I_C

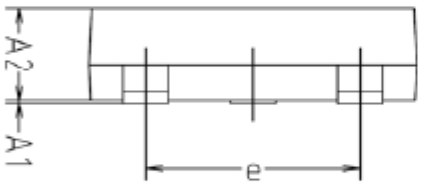


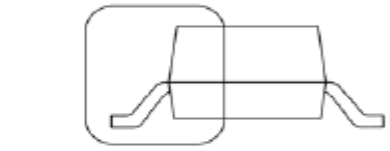
Outline Dimension





DETAIL 'A'

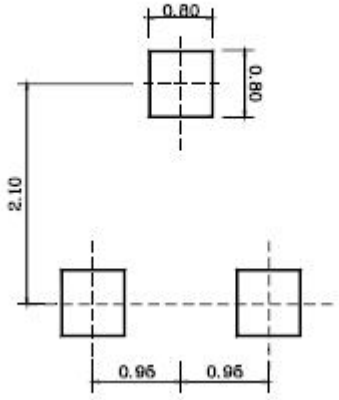




SEE DETAIL 'A'

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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