

Descriptions

- High current application
- Switching application

PIN Connection

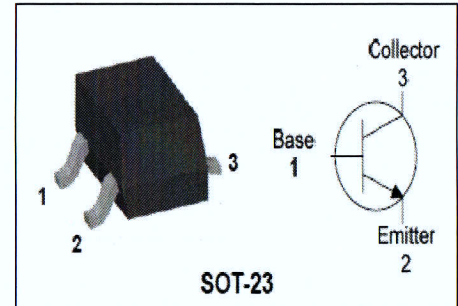
Features

- Suitable for AF-Driver stage and low power Output stage
- Complementary pair with KBC817

Ordering Information

Type NO.	Marking	Package Code
KBC817	NA□ □• 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}	50	V
Collector-Emitter voltage	V_{CEO}	45	V
Emitter-Base voltage	V_{EBO}	5	V
Collector current	I_C	500	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-Emitter breakdown voltage	BV_{CEO}	$I_C=1mA, I_E=0$	45	-	-	V
Base-Emitter turn on voltage	$V_{BE(ON)}$	$V_{CE}=1V, I_C=300mA$	-	-	1.2	V
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$	-	-	700	mV
Collector cut-off current	I_{CBO}	$V_{CB}=25V, I_E=0$	-	-	100	nA
DC current gain	h_{FE}^*	$V_{CE}=1V, I_C=100mA$	100	-	630	-
Transition frequency	f_T	$V_{CB}=5V, I_C=10mA$	100	-	-	MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	16	-	pF

HFE Grade:

Rank	16(A)	25(B)	40(C)
Range	100~250	160~400	250~630
Mark Name	NAA.	NAB.	NAC.

Electrical Characteristic Curves

Fig. 1 $P_C - T_a$

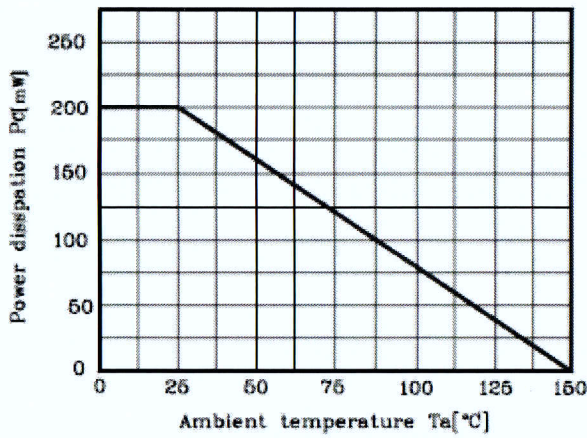


Fig. 2 $I_C - V_{BE}$

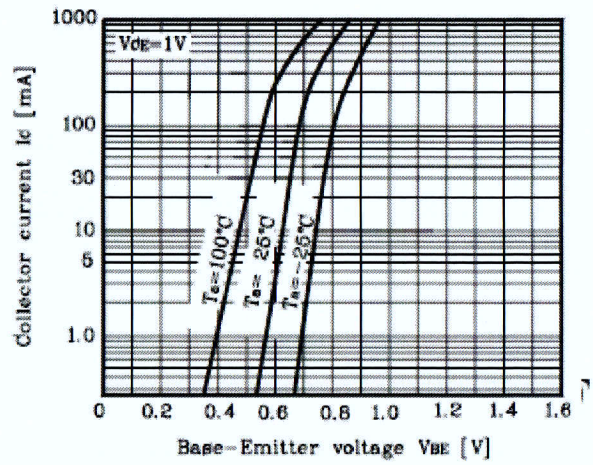


Fig. 3 $I_C - V_{CE}$

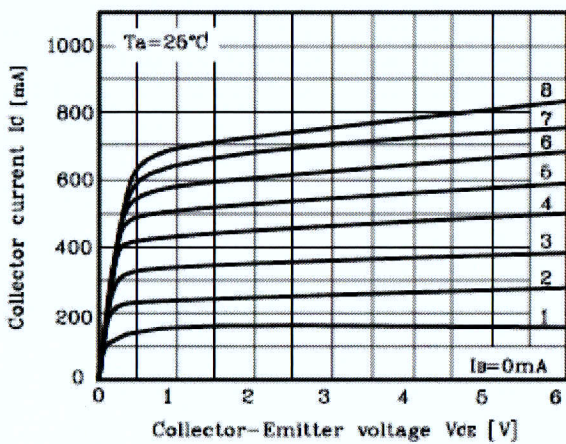


Fig. 4 $V_{CE(sat)} - I_C$

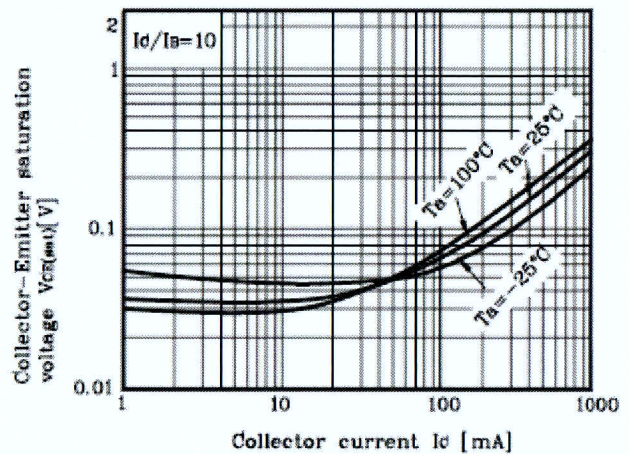
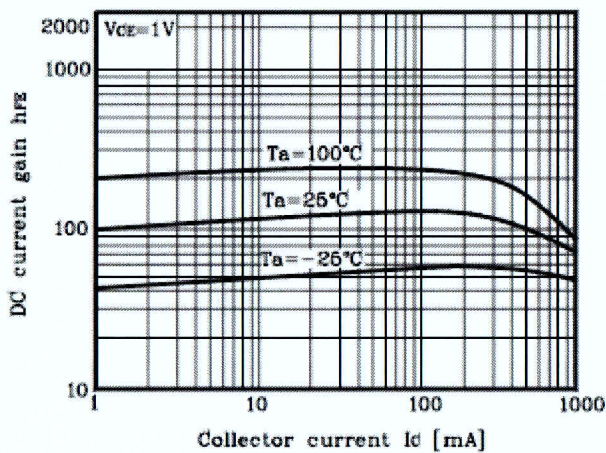
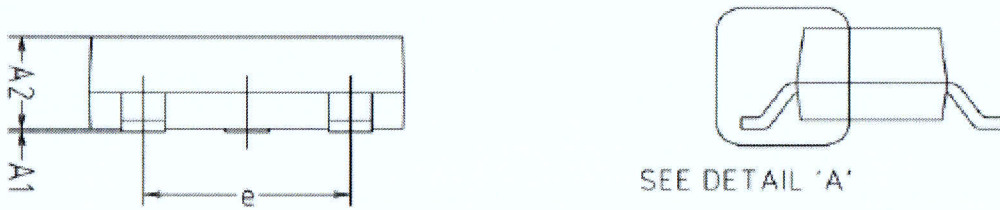
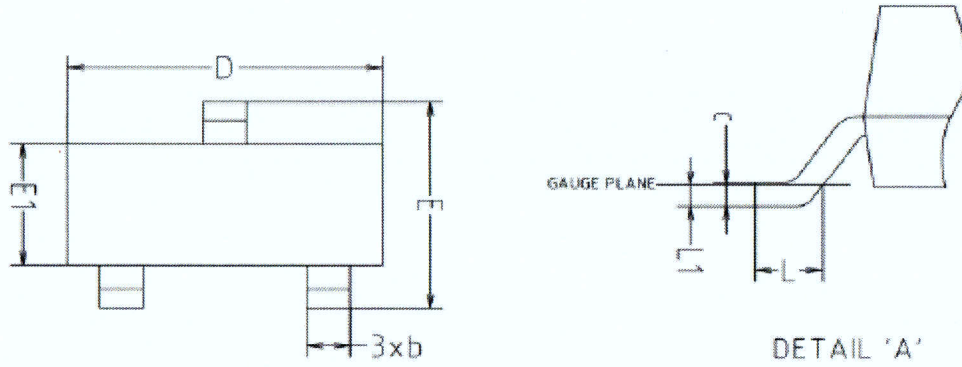


Fig. 5 $h_{FE} - I_C$

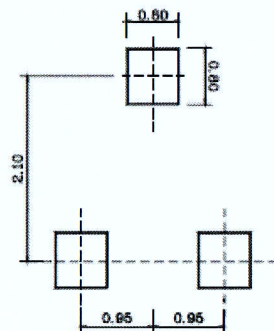


Outline Dimension



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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