

产品规格书

批准	审核	校核	编制
纪春华	朴致均	赵宇辉	郑羿
2018.08.06	2018.08.06	2018.08.06	2018.08.06

规格书更改履历:

序号	更改内容	履历号	更改时间	责任人
1	新规制定	000	2017.07.22	阎平
2	增加封页	001	2018.01.12	郑羿
3	增加 BV 测试条件 增加 HFE 测试项目	002	2018.08.06	郑羿

Descriptions

- High current application
- Switching application

Features

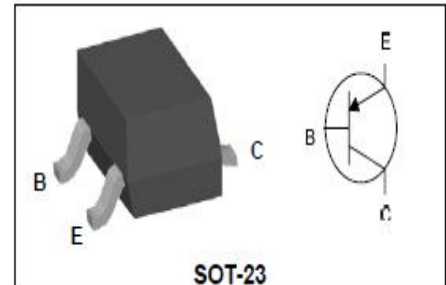
- Suitable for AF-Driver stage and Low power output stage
- Complementary pair with KBC817

Ordering Information

Type NO.	Marking	Package Code
KBC807	LA □ □ ① ② ③	SOT-23

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

PIN Connection



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}	-50~150	°C

Electrical Characteristics

Ta=25°C

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Emitter breakdown voltage	BV_{CEO}	$I_C=-1mA, I_B=0$	-45	-	-	V
Collector-Base breakdown voltage	BV_{CBO}	$I_C=-0.05mA, I_E=0$	-50	-	-	V
Emitter-base breakdown voltage	BV_{EB}	$I_E=-0.05mA, I_C=0$	-5	-	-	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	
DC current gain	h_{FE}	$V_{CE}=-1V, I_C=-500mA$	45	-	-	
Transition frequency	f_T	$V_{CB}=-5V, I_E=-10mA$ $f=30MHz$	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	LAA.	LAB.	LAC.

Electrical Characteristic Curves

Fig. 1 $P_c - T_a$

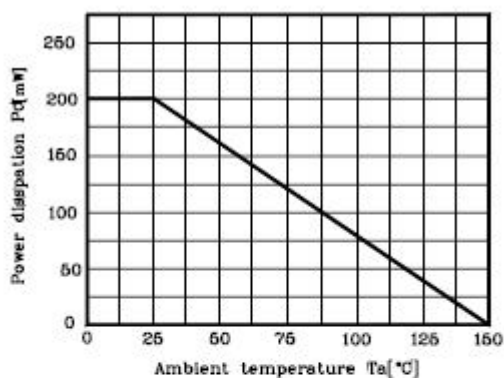


Fig. 2 $I_C - V_{BE}$

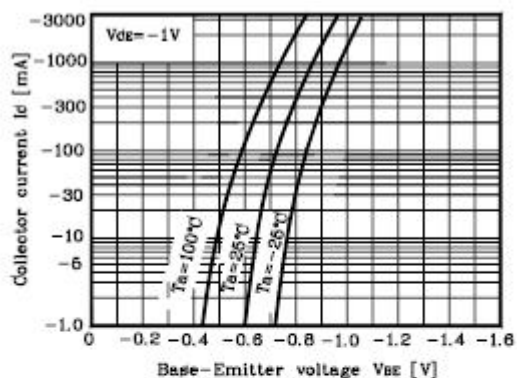


Fig. 3 $I_C - V_{CE}$

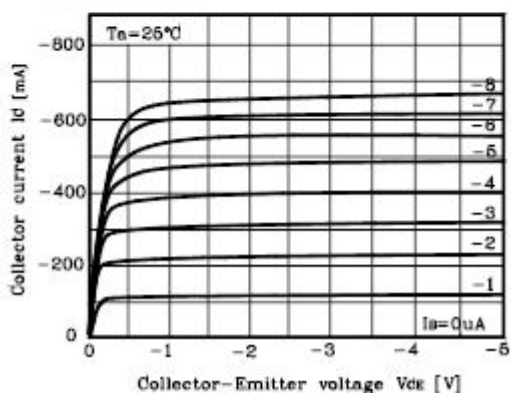


Fig. 4 $h_{FE} - I_C$

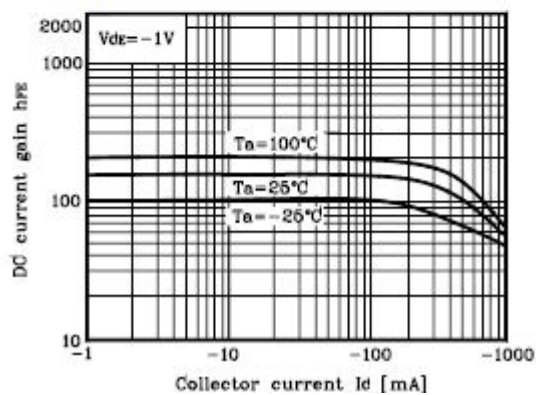
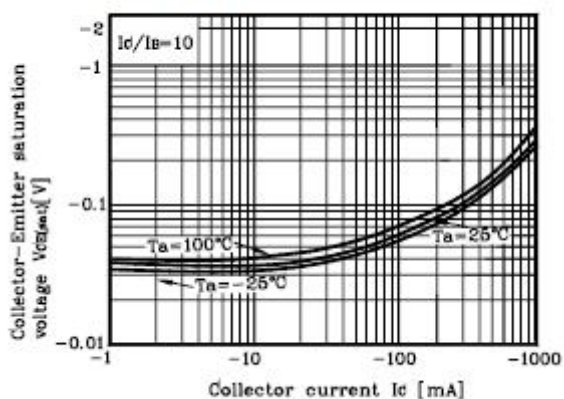
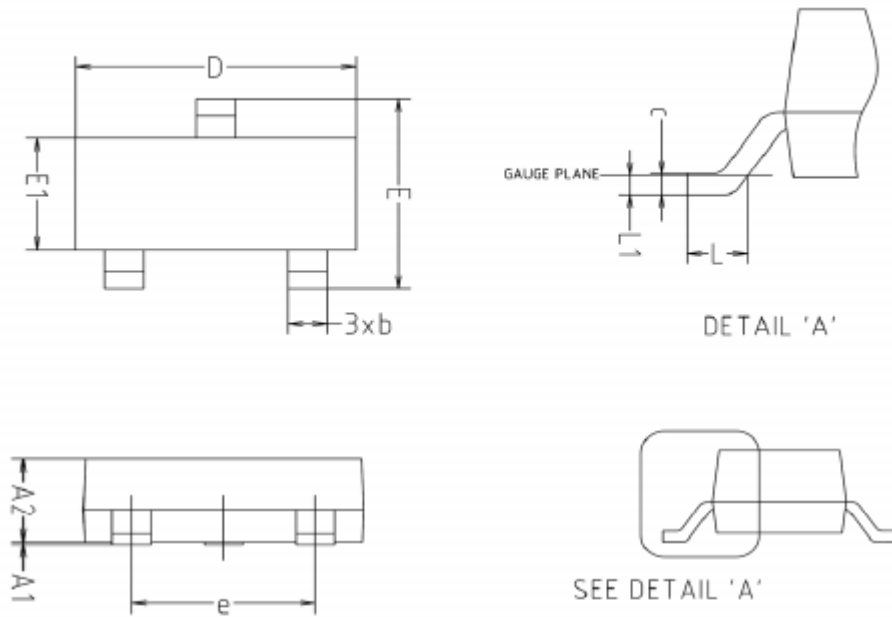


Fig. 5 $V_{CE(sat)} - I_C$

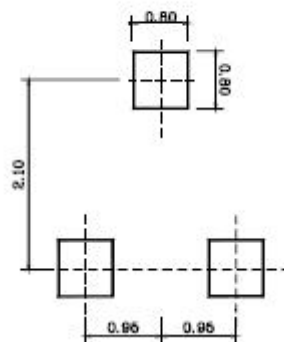


Outline Dimension



SYMBOL	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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