NPN Silicon Transistor

产品规格书

批 准	审 核	校 核	编 制
申东春	纪春华	朴致均	郑羿
2018. 03. 02	2018. 03. 02	2018. 03. 02	2018. 03. 02

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	2018. 03. 02	郑羿

KBC817 16/25/40C

PIN Connection



NPN Silicon Transistor

Descriptions

- High current application
- Switching application

Features

- Suitable for AF-Driver stage and low power Output stage
- Complementary pair with KBC807

Ordering Information

Type NO.	Marking	Package Code
KBC817	<u>NA□</u> <u>□</u> • ① ② ③	SOT-23

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

Collector 3 Base 1

SOT-23

Ta=25°C

Emitter

Absolute maximum ratings

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	BVceo	Ic=1mA, I _E =0	45	-	-	V
Base-Emitter turn on voltage	VBE(ON)	VcE=1V, Ic=300mA	-	-	1.2	V
Collector-Emitter saturation voltage	VCE(sat)	Ic=500mA, I _B =50mA	-	-	700	mV
Collector cut-off current	Ісво	Vcb=25V, IE=0	-	-	100	nA
DC current gain	* hfe	VcE=1V, Ic=100mA	100	-	630	-
Transition frequency	f⊤	VcB=5V, Ic=10mA	100	-	-	MHz
Collector output capacitance	Сор	VcB=10V, IE=0, f=1MHz	-	16	-	pF

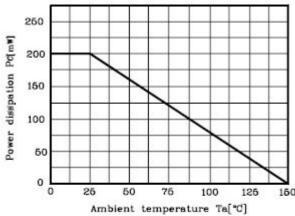
HFE Grade:

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

KBC817 16/25/40C

Electrical Characteristic Curves

Fig. 1 Pc - Ta



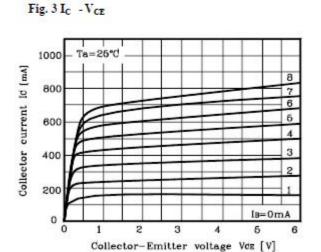


Fig. 5 hFE - Ic

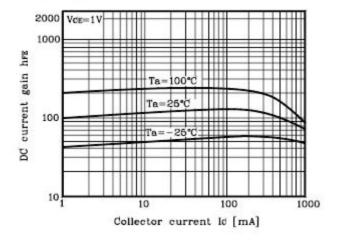


Fig. 2 Ic - VBE

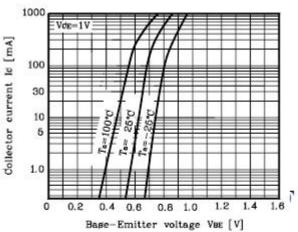
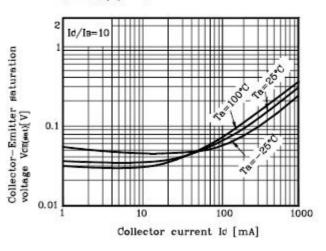
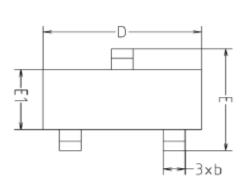


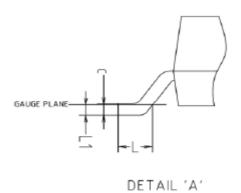
Fig. 4 V_{CE(zat)} - I_C

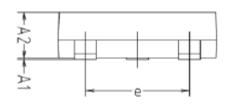


KBC817 16/25/40C

Outline Dimension



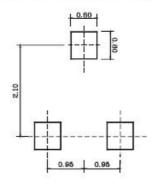






SYMBOL		NOTE		
3111000	MINIMUM	NOMINAL	MAXIMUM	14012
A1	0.00	-	0.10	
A2	0.82	-	1.02	
ь	0.39	0.42	0.45	
c	0.09	0.12	0.15	
D	2.80	2.90	3.00	
E	2.20	2.40	2.60	
E1	1.20	1.30	1.40	
е	1.90BSC			
L	0.20	-	-	
L1	0.12BSC			

***Recommend PCB solder land [Unit: mm]**



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