

PNP Silicon Transistor

# 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

## KBC807 16/25/40C



PNP Silicon Transistor

## **Descriptions**

- •High current application
- Switching application

#### **Features**

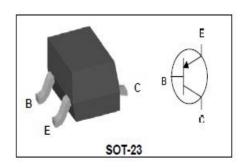
- Suitable for AF-Driver stage and Low power output stage
- Complementary pair with KBC817

## **Ordering Information**

Type NO.	Marking	Package Code
KBC807	<u>LA</u> □ □• 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 <sub>C</sub>	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.	Тур.	Max.	Unit
Collector-Emitter breakdown voltage	BVceo	Ic=-1mA, I <sub>B</sub> =0	-45	ı	-	V
Collector-Base breakdown voltage	ВVсво	Ic=-0.05mA, IE=0	-50	ı	ı	V
Emitter-base breakdown voltage	ВVев	IE=-0.05mA, Ic=0	-5	Ī	ı	V
Base-Emitter turn on voltage	VBE(ON)	VcE=-1V, Ic=-300mA	i	Ī	-1.2	V
Collector-Emitter saturation voltage	VCE(sat)	Ic=-500mA, Iв=-50mA	ı	i	-700	mV
Collector cut-off current	Ісво	V <sub>CB</sub> =-25V, I <sub>E</sub> =0	i	Ī	-100	nA
DC current gain	hfE	VcE=-1V, Ic=-100mA	100	Ī	630	
DC current gain	hfe	VcE=-1V, Ic=-500mA	45	-	-	
Transition frequency	f⊤	V <sub>CB</sub> =-5V, I <sub>E</sub> =-10mA f=30MHz	100	-	-	MHz
Collector output capacitance	Соь	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz	ı	16-	-	pF

## KBC807 16/25/40C

#### 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 Pc-Ta

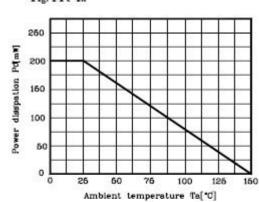


Fig. 2 I<sub>C</sub> -V<sub>BE</sub>

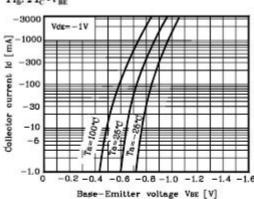


Fig. 3 I<sub>C</sub> - V<sub>CE</sub>

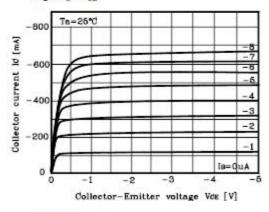


Fig. 4  $h_{FE}$  -  $I_C$ 

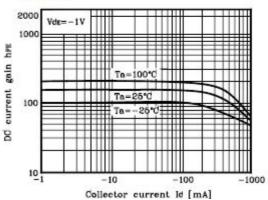
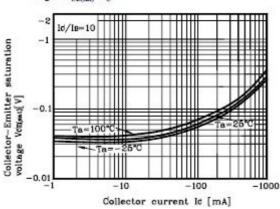
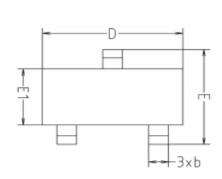


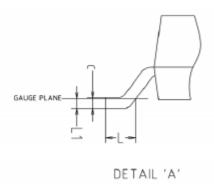
Fig. 5 V<sub>CE(sat)</sub> - I<sub>C</sub>

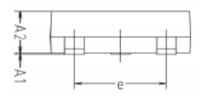


## KBC807 16/25/40C

## **Outline Dimension**



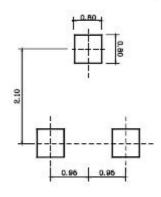






SYMBOL	MILLIMETERS			NOTE
3111000	MINIMUM	NOMINAL	MAXIMUM	NOTE
A1	0.00	-	0.10	
A2	0.82	-	1.02	
ь	0.39	0.42	0.45	
C	0.09	0.12	0.15	
D	2.80	2.90	3.00	
E	2.20	2.40	2.60	
E1	1.20	1.30	1.40	
е	1.90BSC			
L	0.20	-	-	
L1		0.12BSC		

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



The AUK Dalian Corp. products are intended for the use as components in general electronic equipment (Office and communication equipment, measuring equipment, home appliance, etc.).

Please make sure that you consult with us before you use these AUK Dalian Corp. products in equipments which require high quality and / or reliability, and in equipments which could have major impact to the welfare of human life(atomic energy control, airplane, spaceship, transportation, combustion control, all types of safety device, etc.). AUK Dalian Corp. cannot accept liability to any damage which may occur in case these AUK Dalian Corp. products were used in the mentioned equipments without prior consultation with AUK Dalian Corp..

Specifications mentioned in this publication are subject to change without notice.

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bipolar Transistors - BJT category:

Click to view products by Kodenshi manufacturer:

Other Similar products are found below:

619691C MCH4017-TL-H MJ15024/WS MJ15025/WS BC546/116 BC556/FSC BC557/116 BSW67A HN7G01FU-A(T5L,F,T NJVMJD148T4G NSVMMBT6520LT1G NTE187A NTE195A NTE2302 NTE2330 NTE2353 NTE316 IMX9T110 NTE63 NTE65 C4460 SBC846BLT3G 2SA1419T-TD-H 2SA1721-O(TE85L,F) 2SA1727TLP 2SA2126-E 2SB1202T-TL-E 2SB1204S-TL-E 2SC5488A-TL-H 2SD2150T100R SP000011176 FMC5AT148 2N2369ADCSM 2SB1202S-TL-E 2SC2412KT146S 2SC4618TLN 2SC5490A-TL-H 2SD1816S-TL-E 2SD1816T-TL-E CMXT2207 TR CPH6501-TL-E MCH4021-TL-E BC557B TTC012(Q) BULD128DT4 JANTX2N3810 Jantx2N5416 US6T6TR KSF350 068071B