产品规格书

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2018.03.28	2018.03.28	2018.03.28	2018.03.28

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	2018.03.28	郑羿

KODENSHI AUK

KBT2907AC

PNP Silicon Transistor

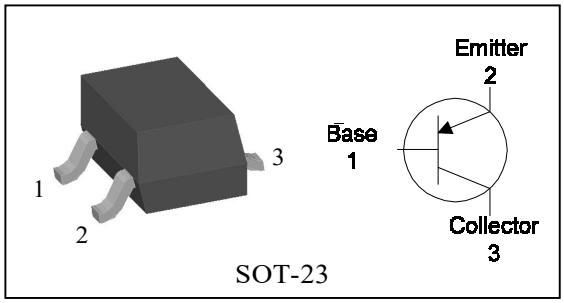
Descriptions

General purpose application
Switching application

Features

Low Leakage current
Low collector saturation voltage enabling low voltage operation
Complementary pair with KBT2222AC

PIN Connection



SOT-23

Ordering Information

Type NO.	Marking	Package Code
KBT2907AC	2F □● ① ②	SOT-23

①Device Code ② Year & Week Code ● Dalian

Absolute maximum ratings

Ta=25 C

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	-60	V
Collector-Emitter voltage	V_{CEO}	-60	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-0.6	A(DC)
	I_{CP}*	-1.2	A(Pulse)
Collector dissipation	P_C**	350	mW
Operating Junction temperature range	T_J	-55~150	C
Storage temperature range	T_{stg}	-55~150	C

* : Single pulse, tp= 300 μs

** : 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=-10uA, I_E=0	-60	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=-1mA, I_B=0	-60	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=-10uA, I_C=0	-5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=-60V, I_E=0	-	-	-20	nA
Collector cut-off current	I_{CEX}	V_{CE}=-30V, V_{EB}=-0.5V	-	-	-50	nA
DC current gain	h_{FE}	V_{CE}=-10V, I_C=-10mA	100	-	-	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C=-150mA, I_B=-15mA	-	-	-0.4	V
Transition frequency	f_T	V_{CE}=-5.0V, I_C=-20mA, f=100MHz	200	-	-	MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	-	8	pF
Turn-on time	t_{on}	V_{CC}=-30V_{dc},I_C=-150mA_{dc}, I_{B1}=-15mA_{dc}	-	-	45	ns
Delay time	t_d		-	-	10	ns
Rise time	t_r		-	-	40	ns
Turn-off time	t_{off}	V_{CC}=-6.0V_{dc},I_C=-150mA_{dc}, I_{B1}=I_{B2}=-15mA_{dc}	-	-	100	ns
Storage time	t_s		-	-	80	ns
Fall time	t_f		-	-	30	ns

Electrical Characteristic Curves

Fig. 1 P_C - T_a

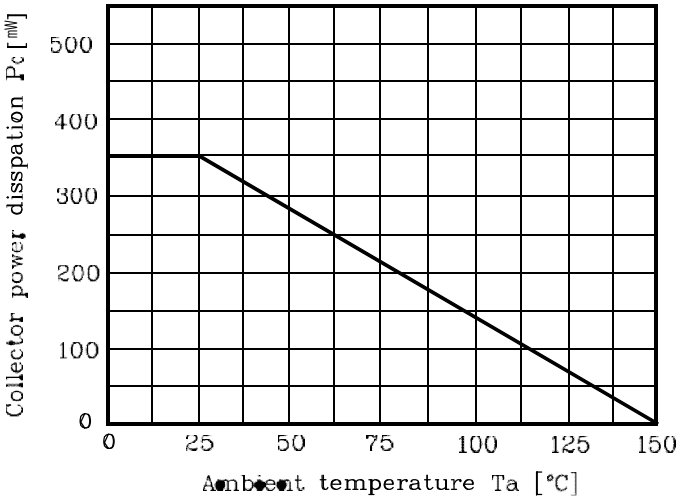


Fig. 2 h_{FE} - I_C

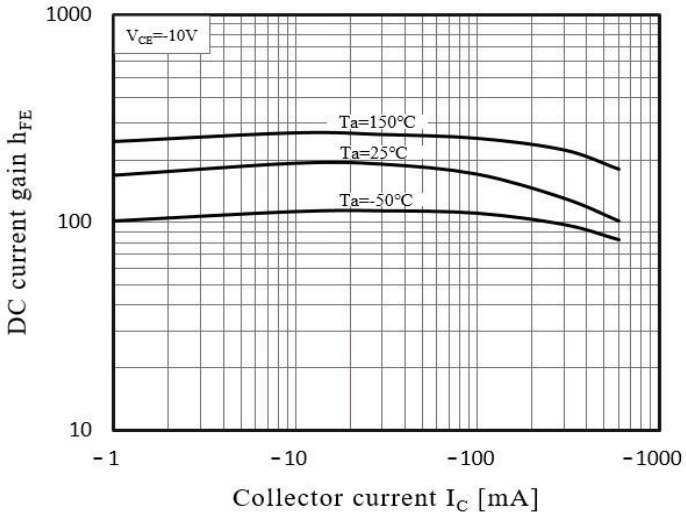


Fig. 3 I_C - $V_{CE(SAT)}$

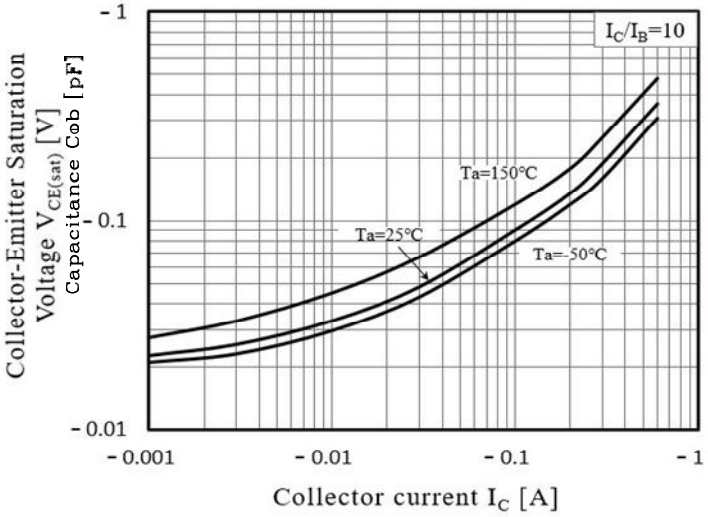


Fig. 4 I_C - $V_{BE(SAT)}$

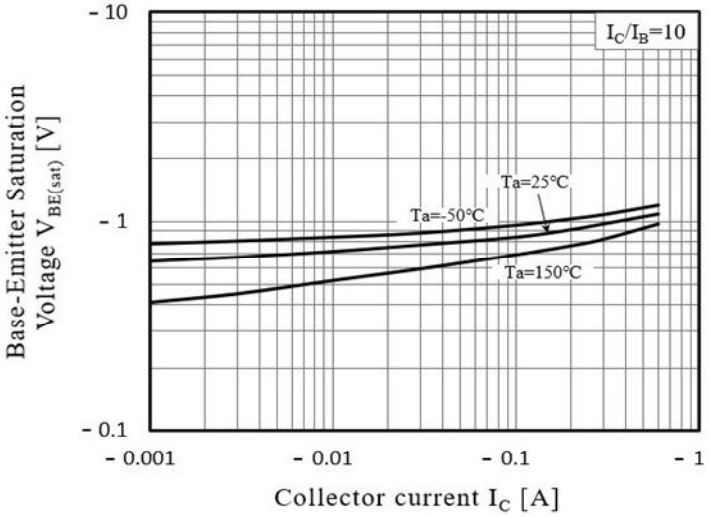
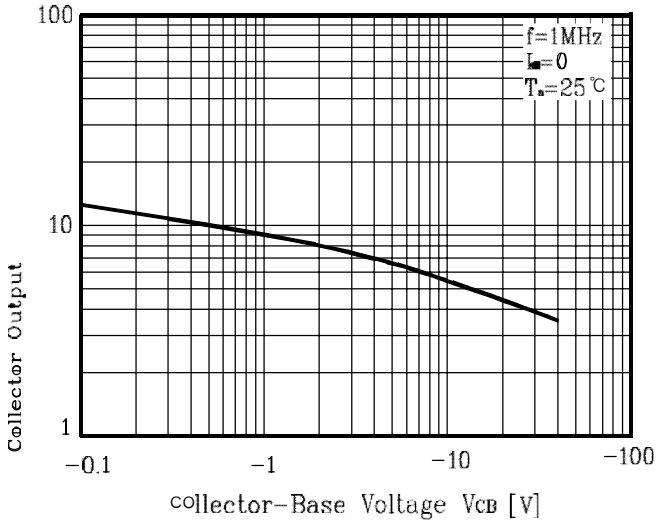
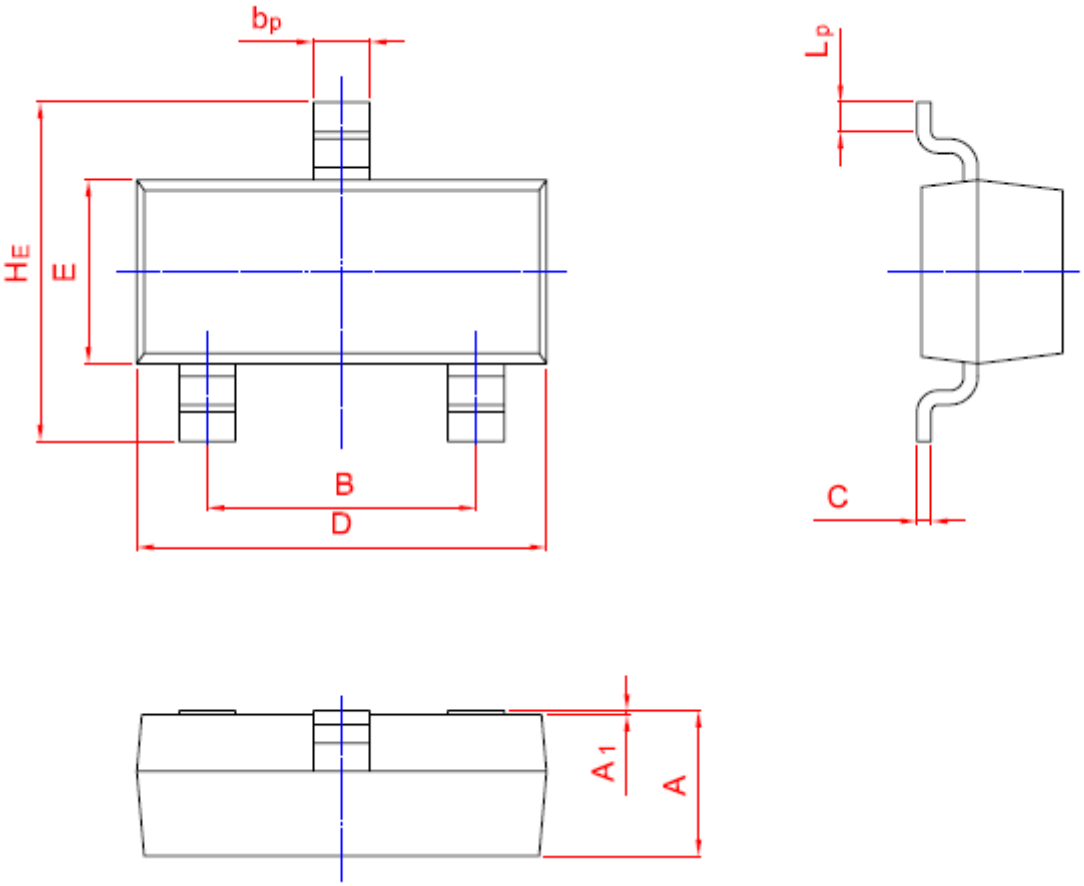


Fig. 5 C_{ob} - V_{CB}



Outline Dimension



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20

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