KODENSHI AUK

STN2907A

PNP Silicon Transistor

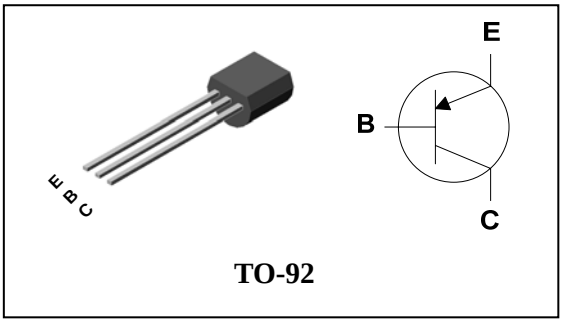
Descriptions

- General purpose application
- Switching application

Features

- Large collector current
- Low collector saturation voltage
- Complementary pair with STN2222A

PIN Connection



TO-92

Ordering Information

Type NO.	Marking	Package Code
STN2907A	STN2907A	TO-92

Absolute maximum ratings

Ta=25°C

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	-60	V
Collector-Emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-600	mA
Collector dissipation	P_C	625	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-Base breakdown voltage	BV_{CBO}	I_C=-10μA, I_E=0	-60	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=-1mA, I_B=0	-50	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=-10μA, I_C=0	-5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=-50V, I_E=0	-	-	-10	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
Transistor frequency	f_T	V_{CE}=-20V, I_C=-20mA	200	-	-	MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	6.0	-	pF

Electrical Characteristic Curves

Fig. 1 P_C-T_a

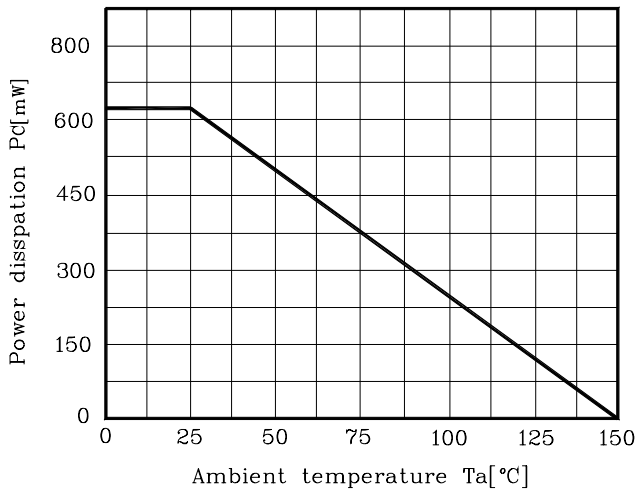


Fig. 2 I_C-V_{BE}

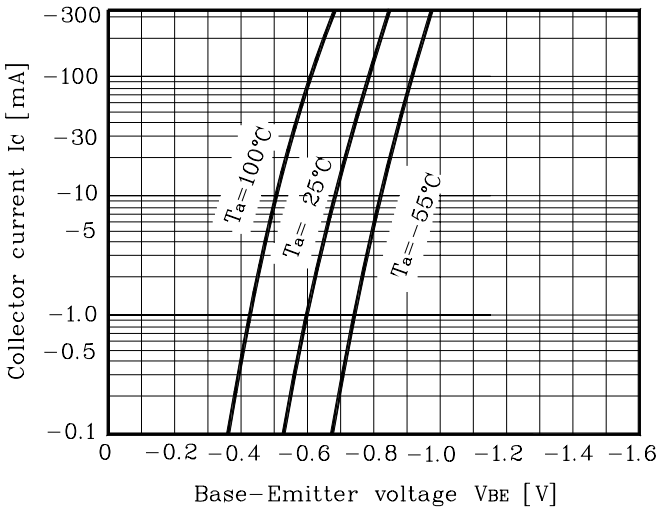


Fig. 3 I_C-V_{CE}

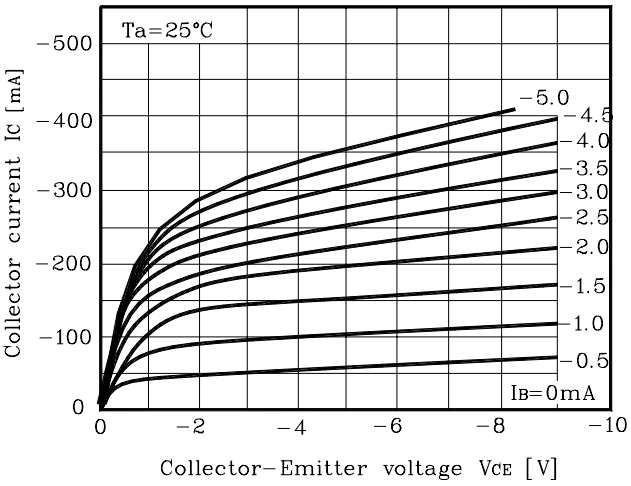


Fig. 4 $V_{CE(sat)}$-I_C

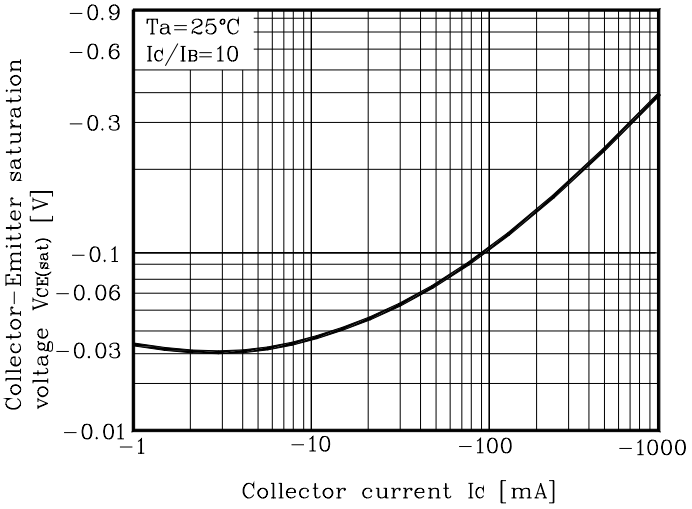


Fig. 5 h_{FE}-I_C

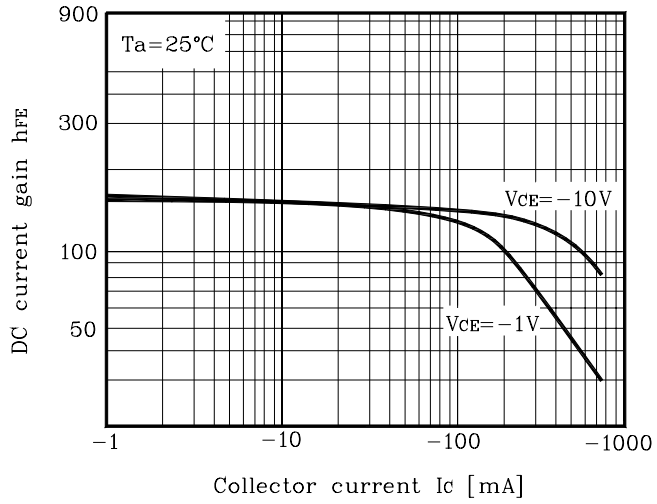
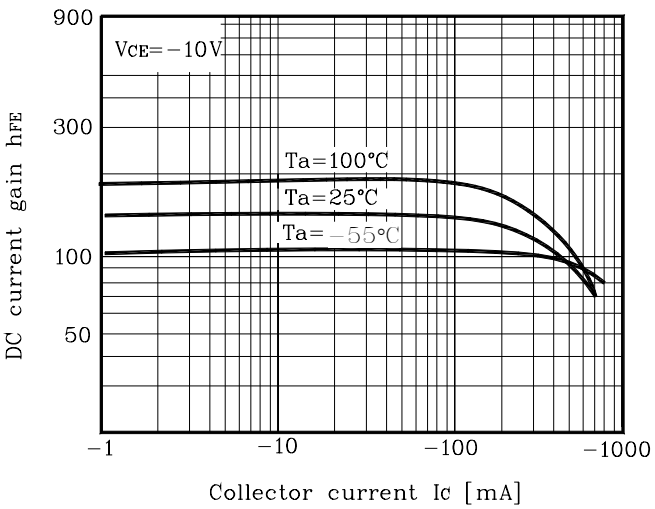
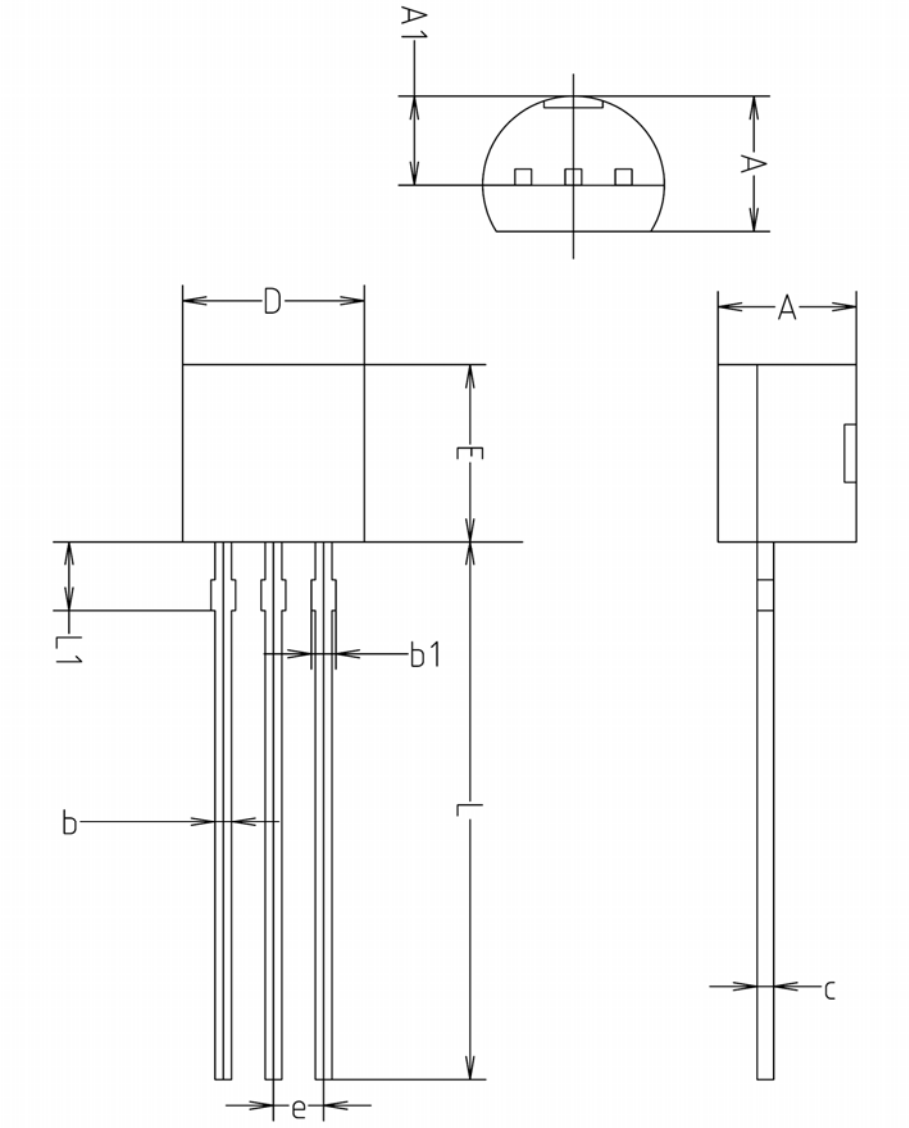


Fig. 6 h_{FE}-I_C



Outline Dimension



SYMBOL	MILLMETERS(mm)		
	MINIMUM	NOMINAL	MAXIMUM
A	3.40	3.50	3.66
A1	2.46	2.51	2.59
b	0.39	0.44	0.53
b1	0.39	–	0.63
c	0.35	0.42	0.47
D	4.48	4.60	4.70
E	4.48	4.60	4.70
e	1.17	1.27	1.37
L	13.70	14.00	14.77
L1	1.55	1.70	2.15

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