

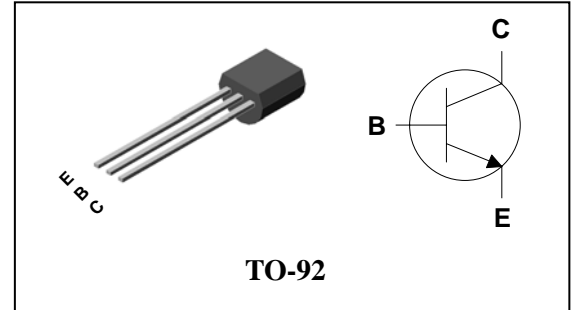
## Descriptions

- General purpose application
- Switching application

## Features

- Large collector current
- Low collector saturation voltage
- Complementary pair with STN2907A

## PIN Connection



## Ordering Information

Type NO.	Marking	Package Code
STN2222A	STN2222A□	TO-92

□ : Year & Week Code

## Absolute maximum ratings

T<sub>a</sub>=25°C

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V <sub>CB0</sub>	75	V
Collector-Emitter voltage	V <sub>CEO</sub>	40	V
Emitter-base voltage	V <sub>EBO</sub>	5	V
Collector current	I <sub>C</sub>	0.6	A
	I <sub>CP</sub> *	1.2	A
Collector dissipation	P <sub>C</sub>	625	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55~150	°C

\* : Single pulse, tp= 300us

## Electrical Characteristics

T<sub>a</sub>=25°C

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	BV <sub>CB0</sub>	I <sub>C</sub> =10μA, I <sub>E</sub> =0	75	-	-	V
Collector-Emitter breakdown voltage	BV <sub>CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	40	-	-	V
Emitter-Base breakdown voltage	BV <sub>EBO</sub>	I <sub>E</sub> =10μA, I <sub>C</sub> =0	5	-	-	V
Collector cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> =60V, I <sub>E</sub> =0	-	-	10	nA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	75	-	-	-
Collector-Emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA	-	-	0.5	V
Transistor frequency	f <sub>T</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> =20mA	250	-	-	MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz	-	6.0	-	pF

Electrical Characteristic Curves

Fig. 1  $P_c$ - $T_a$

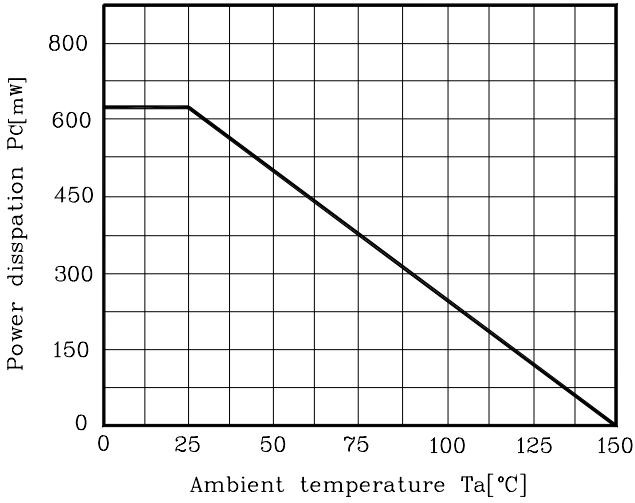


Fig. 2  $I_c$ - $V_{BE}$

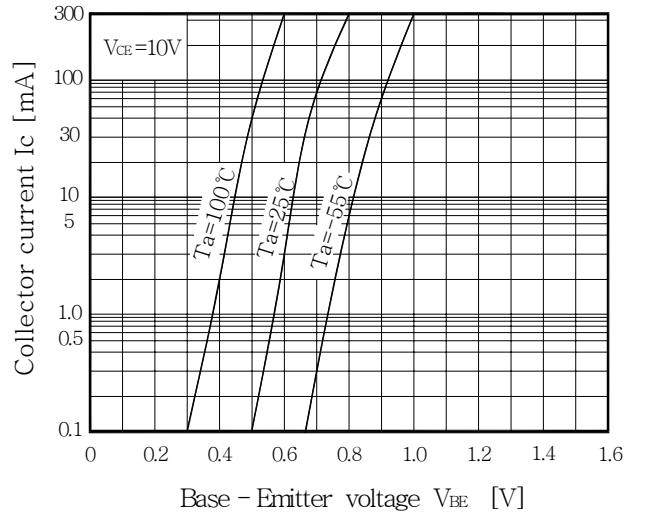


Fig. 3  $I_c$ - $V_{CE}$

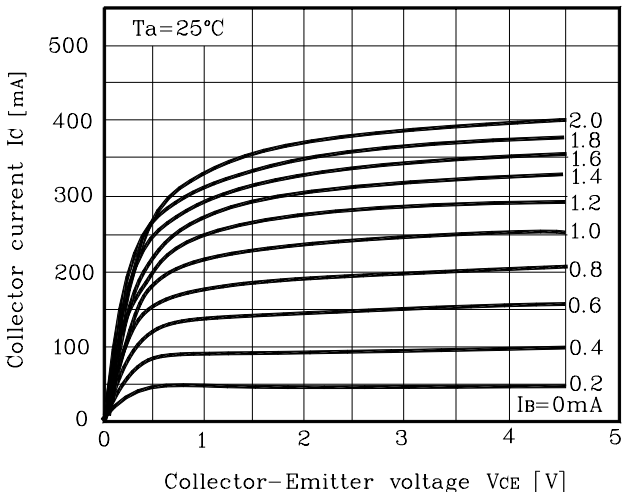


Fig. 4  $V_{CE(sat)}$ - $I_c$

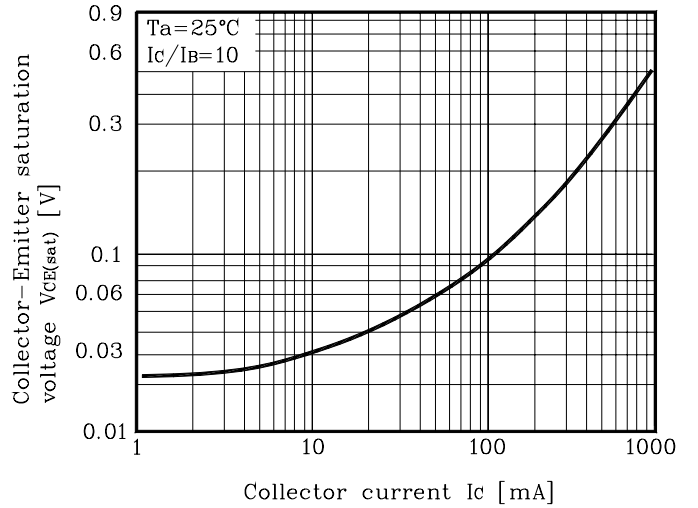


Fig. 5  $h_{FE}$ - $I_c$

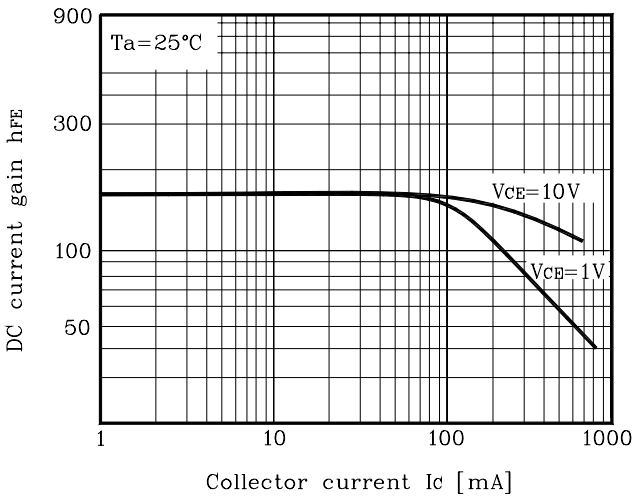
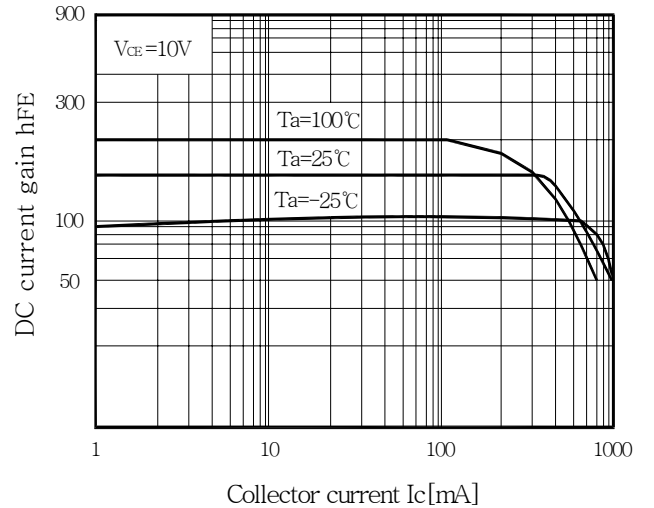
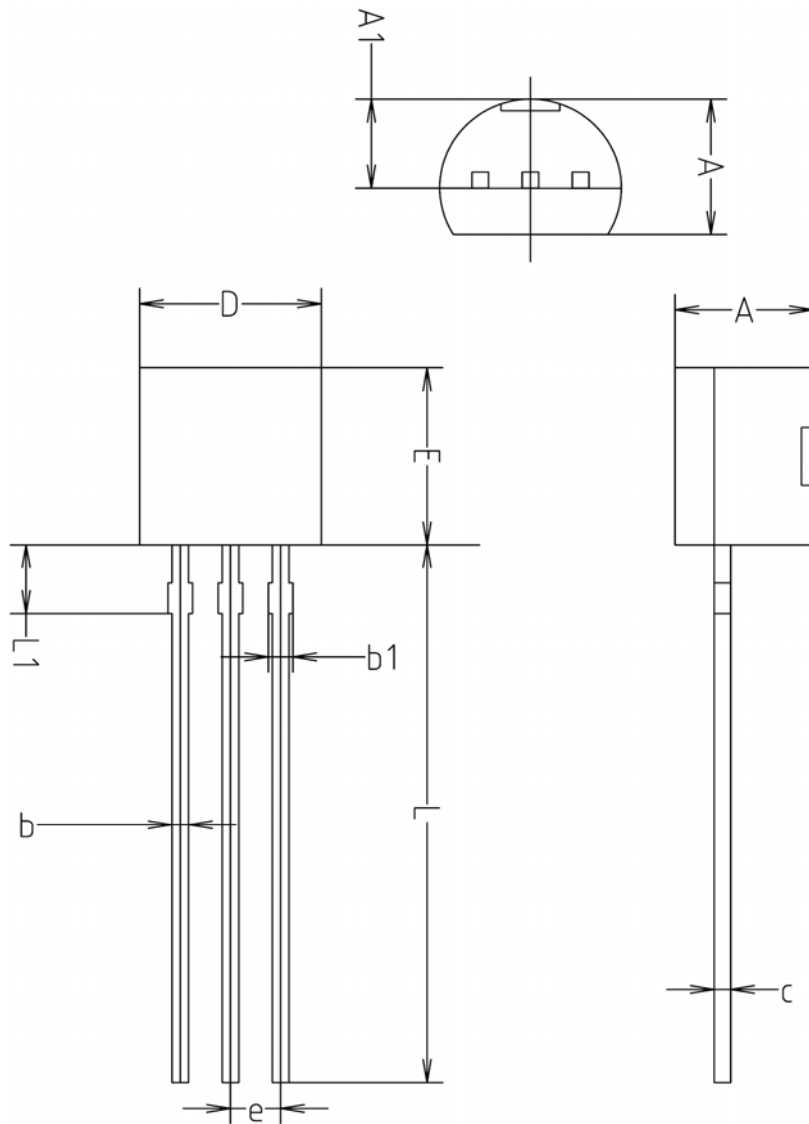


Fig. 6  $h_{FE}$ - $I_c$



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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