

## Descriptions

- General purpose application
- Switching application

## Features

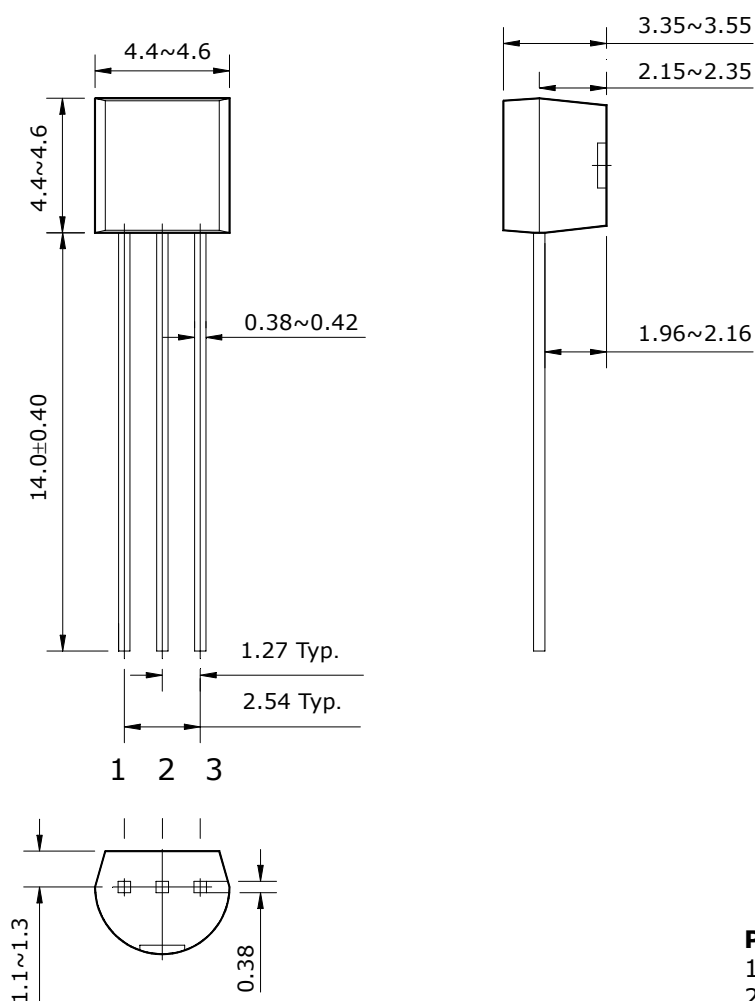
- Large collector current
- Low collector saturation voltage
- Complementary pair with STN2222A

## Ordering Information

Type NO.	Marking	Package Code
STN2907A	STN2907A	TO-92

## Outline Dimensions

unit : mm



### PIN Connections

1. Emitter
2. Base
3. Collector

**Absolute maximum ratings** $T_a=25^{\circ}\text{C}$ 

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	$^{\circ}\text{C}$
Storage temperature	$T_{stg}$	-55~150	$^{\circ}\text{C}$

**Electrical Characteristics** $T_a=25^{\circ}\text{C}$ 

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	$BV_{CBO}$	$I_C=-10\mu\text{A}$ , $I_E=0$	-60	-	-	V
Collector-Emitter breakdown voltage	$BV_{CEO}$	$I_C=-1\text{mA}$ , $I_B=0$	-50	-	-	V
Emitter-Base breakdown voltage	$BV_{EBO}$	$I_E=-10\mu\text{A}$ , $I_C=0$	-5	-	-	V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-50\text{V}$ , $I_E=0$	-	-	-10	nA
DC current gain	$h_{FE}$	$V_{CE}=-10\text{V}$ , $I_C=-10\text{mA}$	100	-	-	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=-150\text{mA}$ , $I_B=-15\text{mA}$	-	-	-0.4	V
Transistor frequency	$f_T$	$V_{CE}=-20\text{V}$ , $I_C=-20\text{mA}$	200	-	-	MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10\text{V}$ , $I_E=0$ , $f=1\text{MHz}$	-	6.0	-	pF

## Electrical Characteristic Curves

Fig. 1  $P_C$ - $T_a$

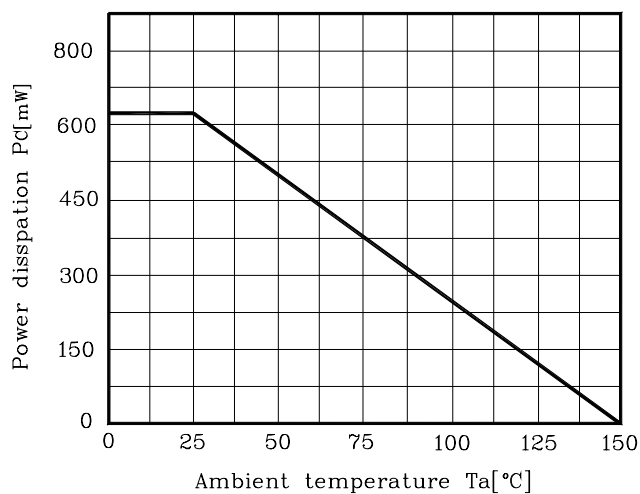


Fig. 2  $I_C$ - $V_{BE}$

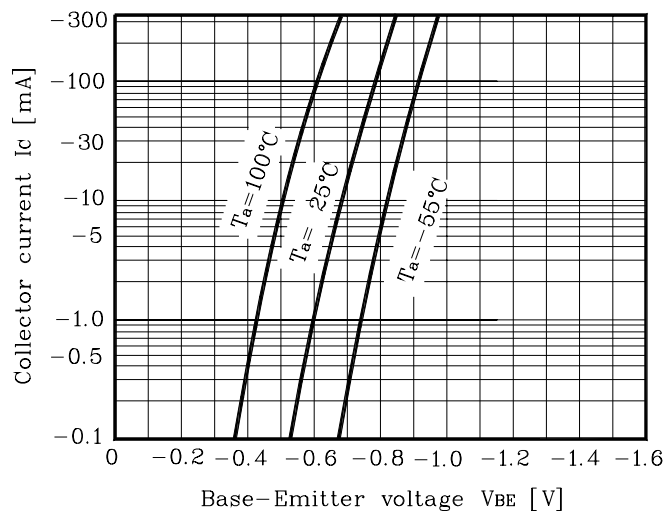


Fig. 3  $I_C$ - $V_{CE}$

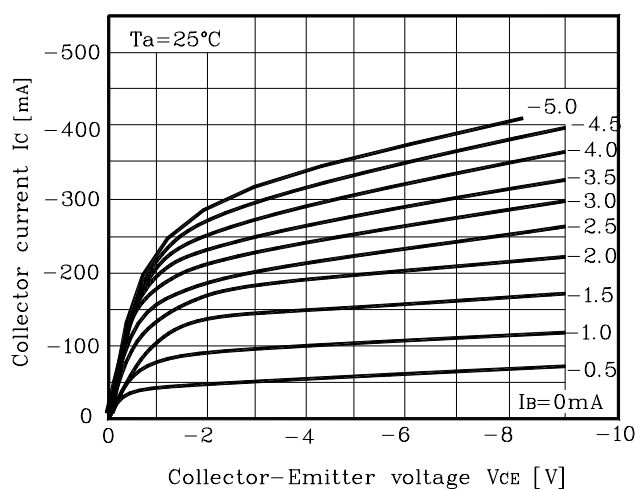


Fig. 4  $V_{CE(sat)}$ - $I_C$

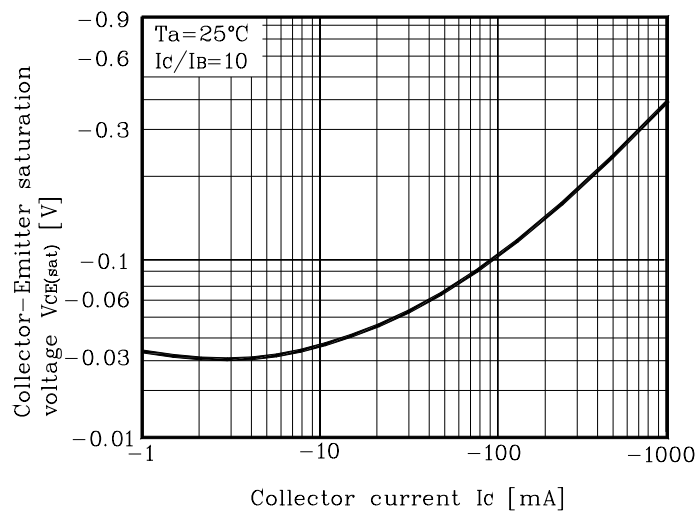


Fig. 5  $h_{FE}$ - $I_C$

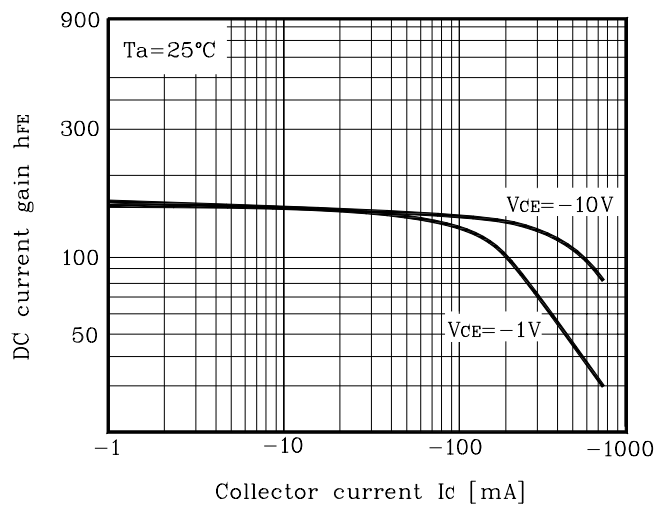
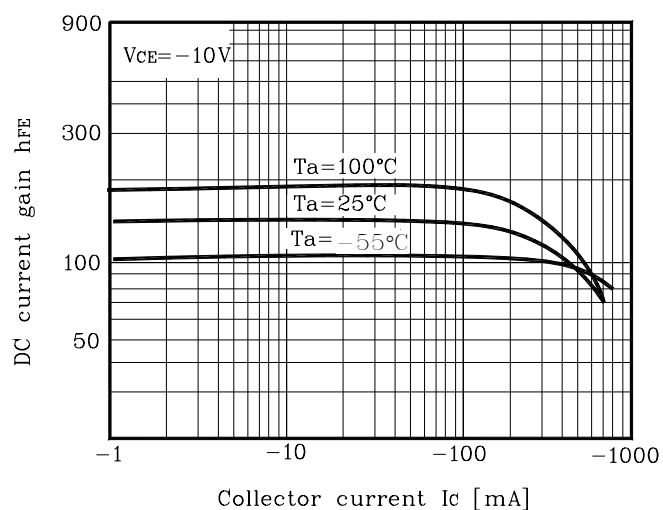


Fig. 6  $h_{FE}$ - $I_C$



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