AUK Semiconductor

STN2907S

PNP Silicon Transistor

Descriptions

- General purpose application
- Switching application

Features

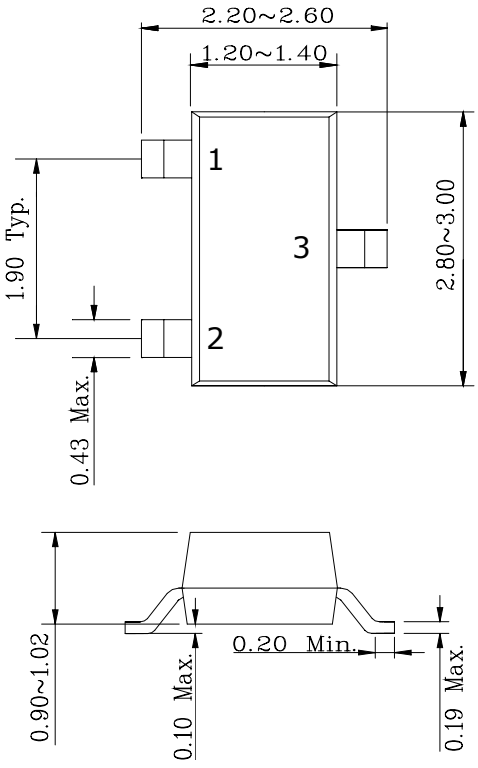
- Large collector current: I_C=-600mA
- Low collector saturation voltage: $V_{CE(sat)}$=-0.4V(Max.) @ I_C=-150mA, I_B=-15mA
- Complementary pair with STN2222S

Ordering Information

Type NO.	Marking	Package Code
STN2907S	GA	SOT-23

Outline Dimensions

unit : mm



PIN Connections
1. Base
2. Emitter
3. Collector

Absolute maximum ratings (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base voltage	V_{CBO}	-60	V
Collector-Emitter voltage	V_{CEO}	-40	V
Emitter-Base voltage	V_{EBO}	-5	V
Collector current	I_C	-600	mA
Collector power dissipation	P_C^*	350	mW
Junction temperature	T_J	150	°C
Storage temperature range	T_{stg}	-55~150	°C

* : 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=-10μA, I_E=0	-60	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=-1mA, I_B=0	-40	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=-10μA, I_C=0	-5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=-60V, I_E=0	-	-	-10	nA
DC current gain	h_{FE}	V_{CE}=-10V, I_C=-10mA	75	-	-	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C=-150mA, I_B=-15mA	-	-	-0.4	V
Transition frequency	f_T	V_{CE}=-20V, I_C=-20mA	250	-	-	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

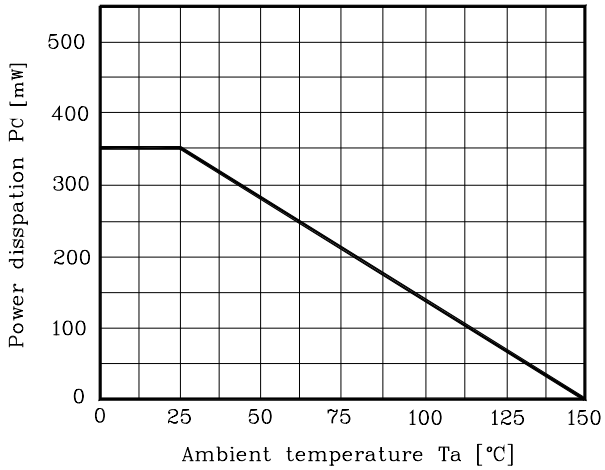


Fig. 2 I_C - V_{BE}

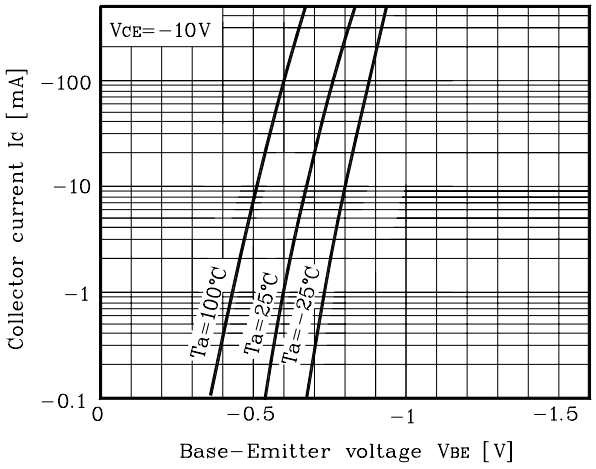


Fig. 3 I_C - V_{CE}

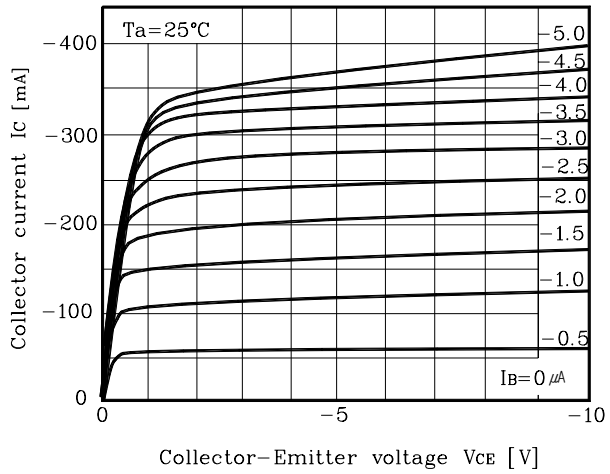


Fig. 4 $V_{CE(sat)}$ - I_C

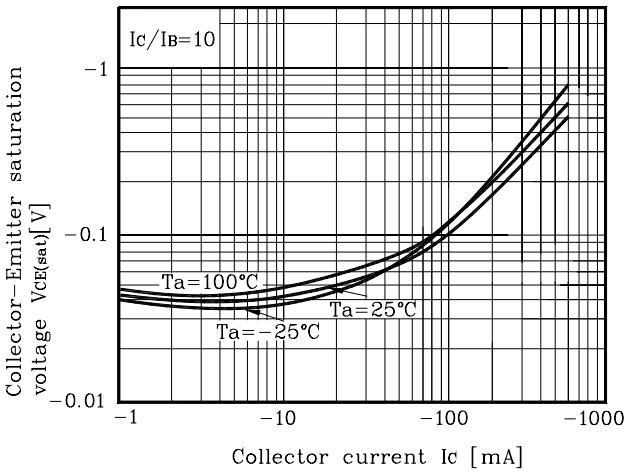


Fig. 5 h_{FE} - I_C

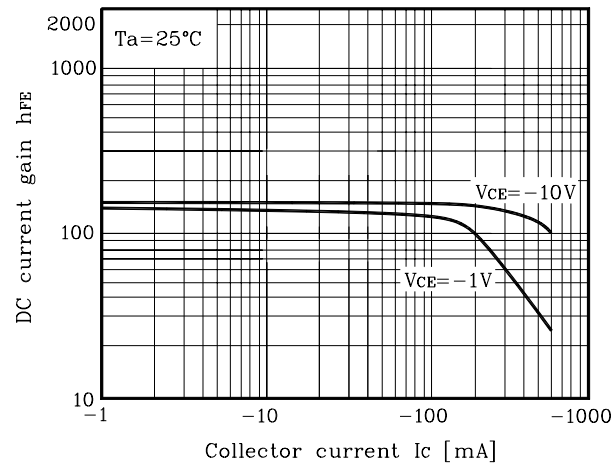
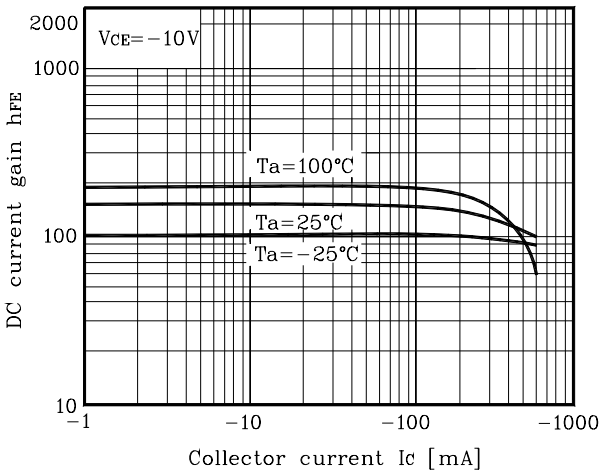


Fig. 6 h_{FE} - I_C



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