AUK Semiconductor

STS1979

PNP Silicon Transistor

Description

- Medium power amplifier

Features

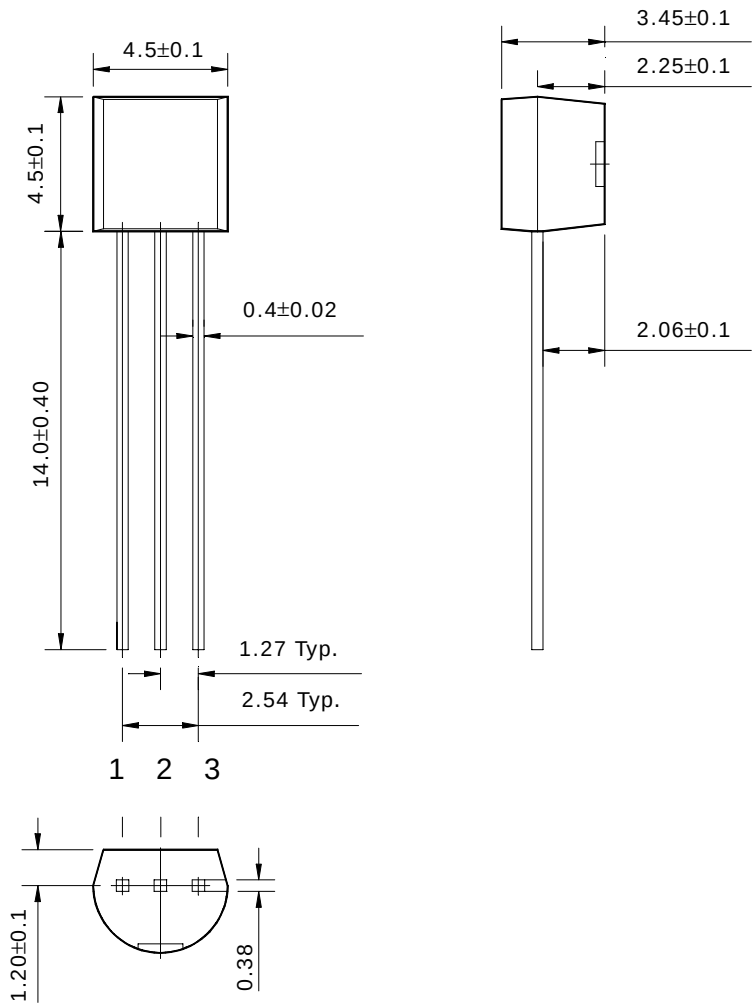
- Large collector current : I_{CMax}=-500mA
- Suitable for low-Voltage operation because of its low saturation voltage
- Complementary pair with STS5342

Ordering Information

Type NO.	Marking	Package Code
STS1979	STS1979	TO-92

Outline Dimensions

unit : mm



PIN Connections
1. Emitter
2. Base
3. Collector

Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	-40	V
Collector-Emitter voltage	V_{CEO}	-32	V
Emitter-Base voltage	V_{EBO}	-5	V
Collector current	I_C	-500	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=-100μA, I_E=0	-40	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=-10mA, I_B=0	-32	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=-10μA, I_C=0	-5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=-40V, I_E=0	-	-	-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-0.1	μA
DC current gain	h_{FE}	V_{CE}=-1V, I_C=-100mA	120	-	240	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA	-	-	-0.25	V
Transistor frequency	f_T	V_{CE}=-6V, I_C=-20mA	-	200	-	MHz
Collector output capacitance	C_{ob}	V_{CB}=-6V, I_E=0, f=1MHz	-	7.5	-	pF

Electrical Characteristic Curves

Fig. 1 P_C - T_a

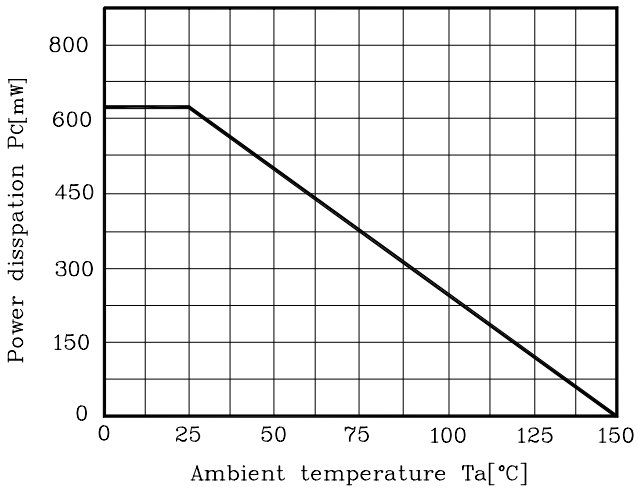


Fig. 2 I_C - V_{BE}

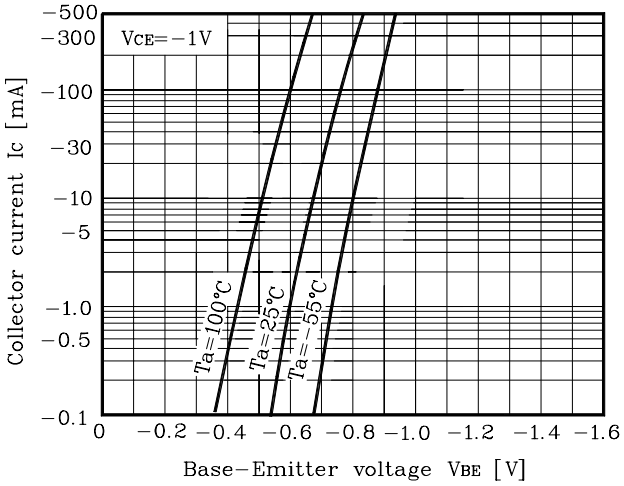


Fig. 3 I_C - V_{CE}

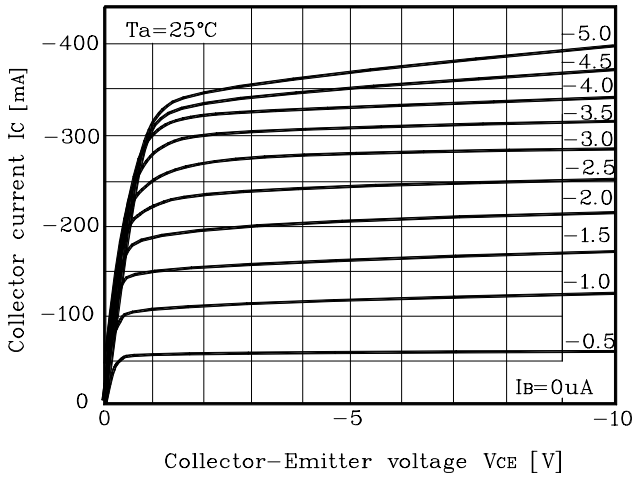


Fig. 4 $V_{CE(sat)}$ - I_C

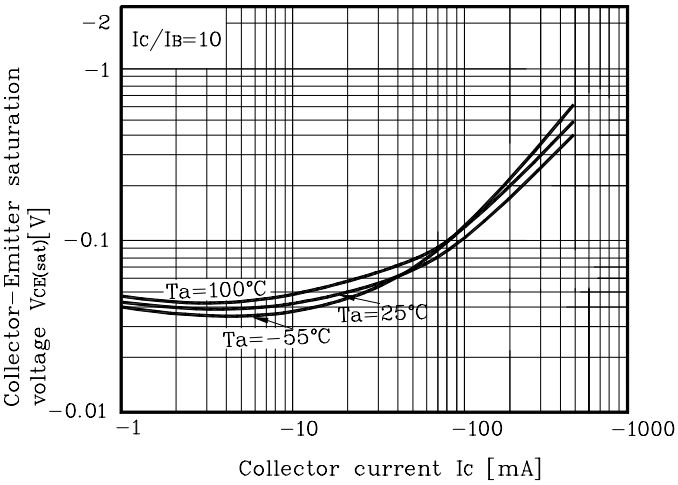


Fig. 5 h_{FE} - I_C

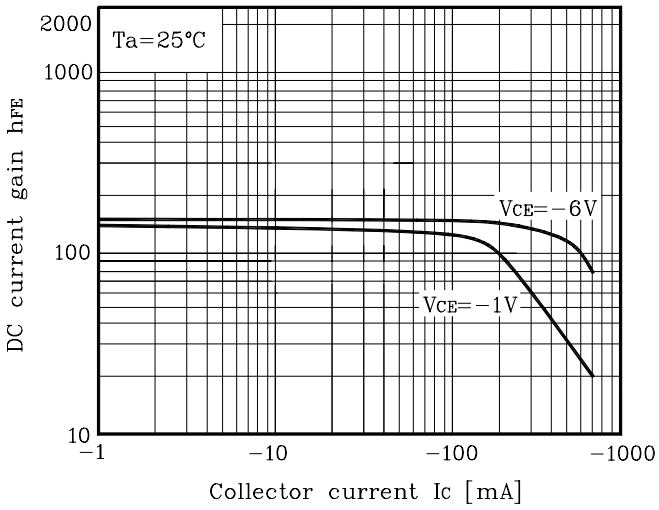


Fig. 6 h_{FE} - I_C

