

STN3906S

PNP Silicon Transistor

Descriptions

- General purpose small signal amplifier
- Switching application

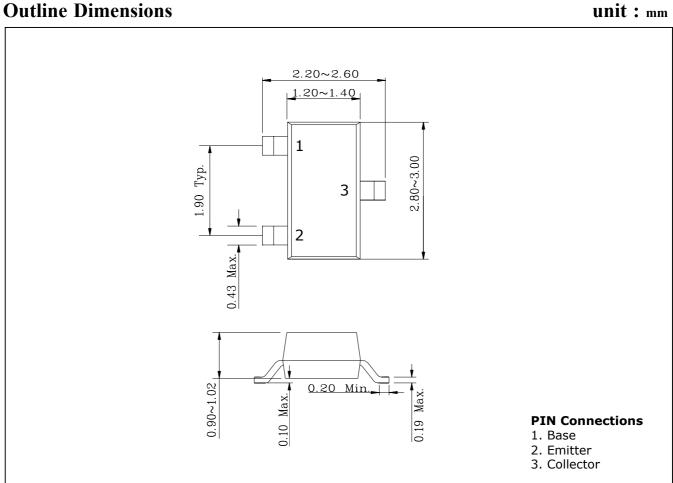
Features

- Collector saturation voltage : $V_{CE(sat)}$ = -0.5V(Max.) @ I_{C} = -50mA, I_{B} = -5mA Low output capacitance : C_{ob} = 4.5pF(Max.) @ V_{CB} = -5V, I_{E} = 0, f=1MHz
- Complementary pair with STN3904S

Ordering Information

Type NO.	Marking	Package Code		
STN3906S	JA	SOT-23		

Outline Dimensions



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Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base voltage	V_{CBO}	-40	V
Collector-Emitter voltage	V_{CEO}	-40	V
Emitter-Base voltage	V_{EBO}	-5	V
Collector current	I_{C}	-100	mA
Collector power dissipation	P_{C}^{*}	350	mW
Junction temperature	T ₁	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}	$I_C = -10 \mu A, I_E = 0$	-40	-	-	V
Collector-Emitter breakdown voltage	BV _{CEO}	$I_C=-1$ mA, $I_B=0$	-40	1	ı	V
Emitter-Base breakdown voltage	BV _{EBO}	$I_E = -10 \mu A, I_C = 0$	-5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB} =-40V, I_{E} = 0	-	-	-0.1	μΑ
DC current gain	h _{FE}	V _{CE} =-1V, I _C =-10mA	100	1	300	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C =-50mA, I_B =-5mA	-	-	-0.5	V
Transition frequency	f_T	V_{CE} =-20V, I_{C} =-10mA	250	-	-	MHz
Collector output capacitance	C _{ob}	V_{CB} =-5V, I_{E} =0, f=1MHz	-	-	4.5	pF

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Electrical Characteristic Curves

Fig. 1 $P_C - T_a$

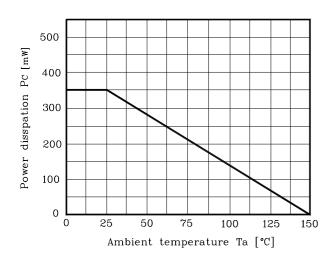


Fig. 3 h_{FE} - I_{C}

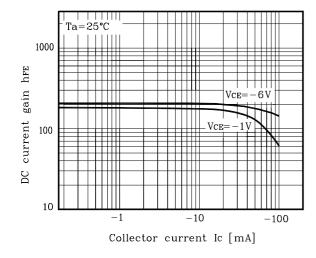


Fig. 5 V_{CE(sat)} - I_C

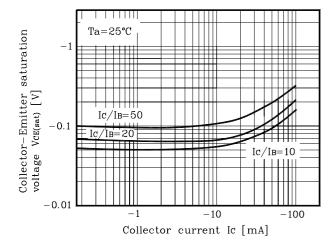


Fig. 2 I_C - V_{BE}

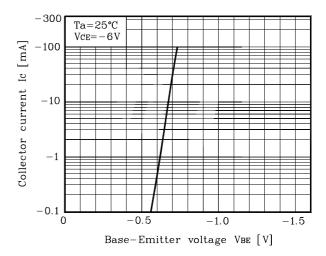
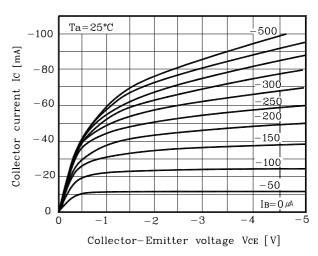


Fig. 4 I_C - V_{CE}



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