AUK Semiconductor

STB1277L

PNP Silicon Transistor

Description

- Audio power amplifier
- High current application

Features

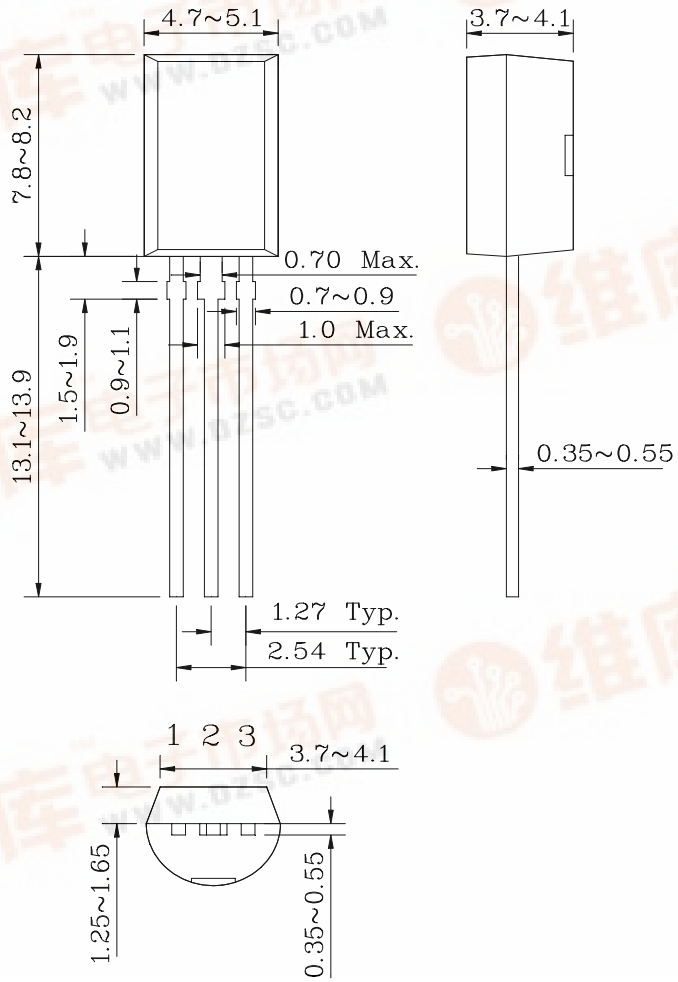
- High current : I_C=-2A
- Complementary pair with STD1862L

Ordering Information

Type NO.	Marking	Package Code
STB1277L	STB1277	TO-92L

Outline Dimensions

unit : mm



PIN Connections
1. Emitter
2. Collector
3. Base

Absolute maximum ratings (Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	-30	V
Collector-Emitter voltage	V_{CEO}	-30	V
Emitter-Base voltage	V_{EBO}	-5	V
Collector current	I_C	-2	A
Collector dissipation	P_C	1	W
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	-30	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=-1mA, I_B=0	-30	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=-1mA, I_C=0	-5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=-30V, I_E=0	-	-	-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0	-	-	-100	nA
DC current gain	h_{FE}*	V_{CE}=-2V, I_C=-500mA	100	-	320	-
Base-Emitter on voltage	$V_{BE(on)}$	V_{CE}=-2V, I_C=-500mA	-	-	-1	V
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C=-2A, I_B=-0.2A	-	-	-0.8	V
Transition frequency	f_T	V_{CB}=-5V, I_C=-50mA	-	170	-	MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	48	-	pF

* : h_{FE} rank / O : 100~200, Y : 160~320

Electrical Characteristic Curves

Fig. 1 P_C - T_a

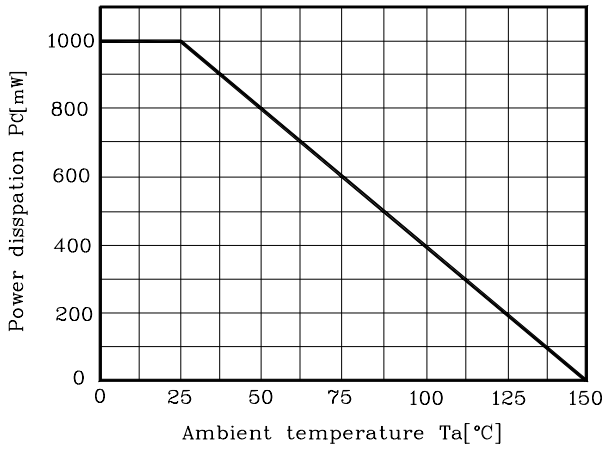


Fig. 2 I_C - V_{BE}

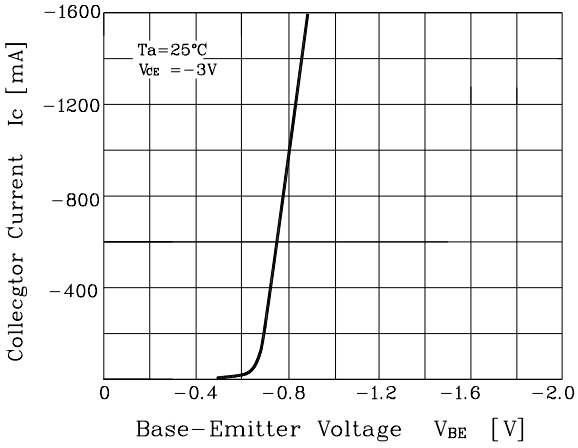


Fig. 3 I_C - V_{CE}

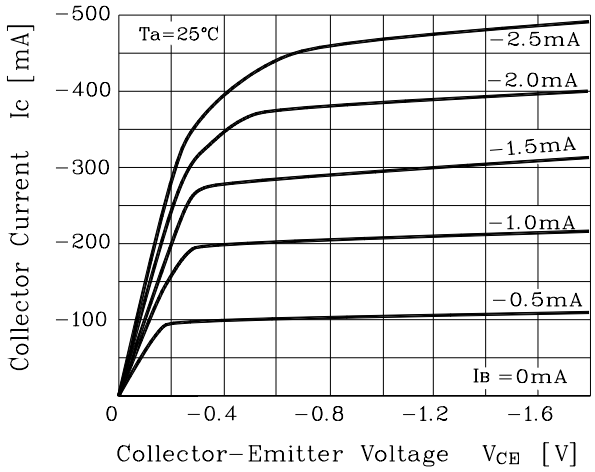


Fig. 4 $V_{CE(sat)}$ - I_C

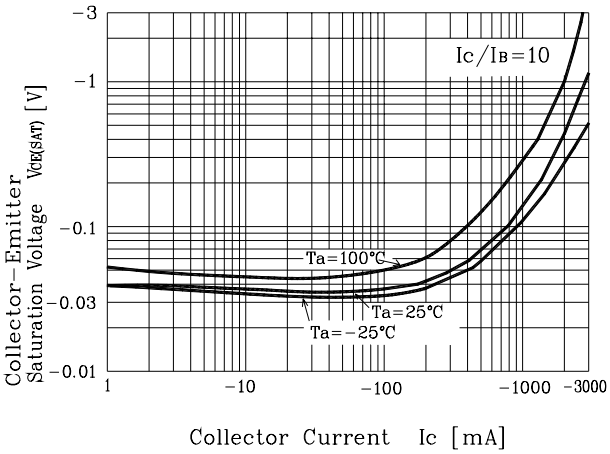
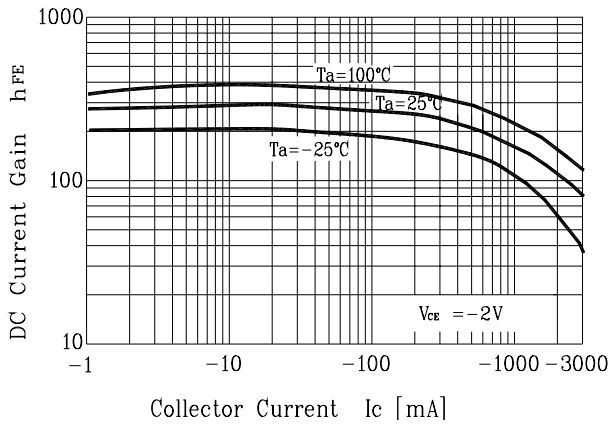


Fig. 5 h_{FE} - I_C



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