



## **Description**

- Audio power amplifier
- High current application

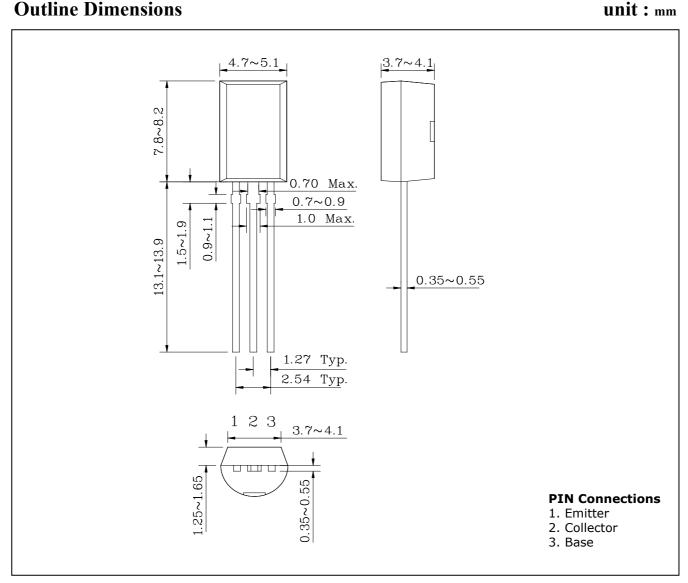
#### **Features**

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

## **Ordering Information**

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

### **Outline Dimensions**



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# **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	А
Collector dissipation	P <sub>C</sub>	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.	Тур.	Max.	Unit
Collector-Base breakdown voltage	BV <sub>CBO</sub>	$I_C = -100 \mu A, I_E = 0$	-30	-	-	V
Collector-Emitter breakdown voltage	BV <sub>CEO</sub>	$I_C=-1$ mA, $I_B=0$	-30	-	ı	V
Emitter-Base breakdown voltage	$BV_{EBO}$	$I_E$ =-1mA, $I_C$ =0	-5	-	ı	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 <sub>FE</sub> *	V <sub>CE</sub> =-2V, I <sub>C</sub> =-500mA	100	-	320	-
Base-Emitter on voltage	$V_{BE(on)}$	V <sub>CE</sub> =-2V, I <sub>C</sub> =-500mA	-	-	-1	V
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I <sub>C</sub> =-2A, I <sub>B</sub> =-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

<sup>\* :</sup>  $h_{FE}$  rank / O : 100~200, Y : 160~320

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### **Electrical Characteristic Curves**

Fig. 1  $P_C$  -  $T_a$ 

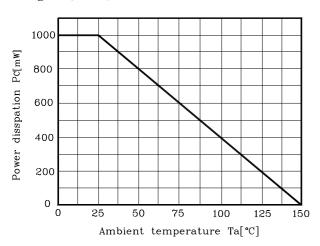


Fig. 3  $I_C$  -  $V_{CE}$ 

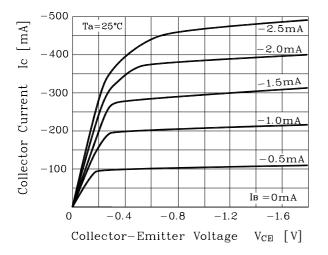


Fig. 5  $h_{FE}$  -  $I_{C}$ 

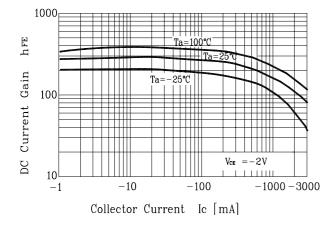


Fig. 2  $I_C$  -  $V_{BE}$ 

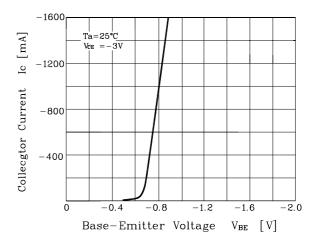
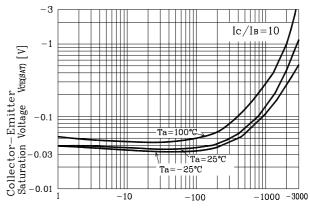


Fig. 4  $V_{\text{CE(sat)}}\,$  -  $\,I_{\text{C}}$ 



Collector Current Ic [mA]

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