

**STB1277L** 

**PNP Silicon Transistor** 

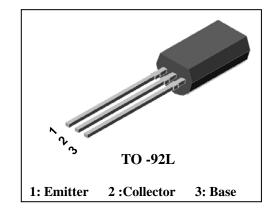
#### Description

- Audio power amplifier
- High current application

#### **Features**

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

#### **PIN Connection**



#### **Ordering Information**

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

#### Absolute maximum ratings

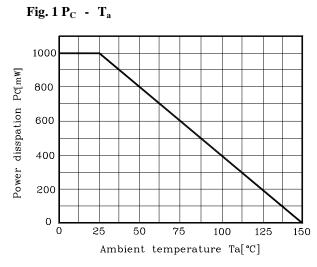
Absolute maximum ratings			(Ta=25°C)
Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V <sub>CBO</sub>	-30	V
Collector-Emitter voltage	V <sub>CEO</sub>	-30	V
Emitter-Base voltage	V <sub>EBO</sub>	-5	V
Collector current	Ι <sub>C</sub>	-2	А
Collector dissipation	P <sub>C</sub>	1	W
Junction temperature	Tj	150	°C
Storage temperature	T <sub>stg</sub>	-55~150	°C

#### **Electrical Characteristics**

<b>Electrical Characteristics</b>					(Ta:	=25°C)
Characteristic	Symbol	Test Condition	Min.	Тур.	Max.	Unit
Collector-Base breakdown voltage	$BV_{CBO}$	$I_{C}$ =-100 $\mu$ A, $I_{E}$ =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 <sub>CBO</sub>	$V_{CB}$ =-30V, $I_{E}$ =0	-	-	-100	nA
Emitter cut-off current	I <sub>EBO</sub>	$V_{EB}$ =-5V, $I_{C}$ =0	-	-	-100	nA
DC current gain	${\sf h}_{\sf FE}^{*}$	$V_{CE}$ =-2V, $I_{C}$ =-500mA	100	-	320	-
Base-Emitter on voltage	V <sub>BE(on)</sub>	$V_{CE}$ =-2V, $I_{C}$ =-500mA	-	-	-1	V
Collector-Emitter saturation voltage	V <sub>CE(sat)</sub>	$I_{C}$ =-2A, $I_{B}$ =-0.2A	-	-	-0.8	V
Transition frequency	f <sub>T</sub>	$V_{CB}$ =-5V, $I_{C}$ =-50mA	-	170	-	MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB}$ =-10V, $I_{E}$ =0, f=1MHz	-	48	-	pF

: h<sub>FE</sub> rank / O : 100~200, Y : 160~320

### **Electrical Characteristic Curves**





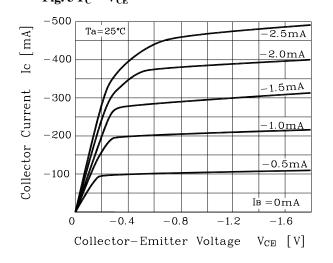
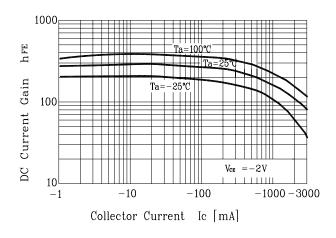
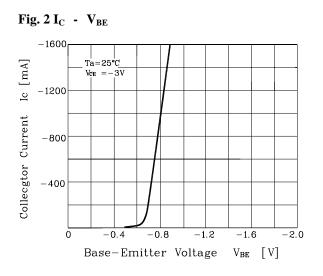
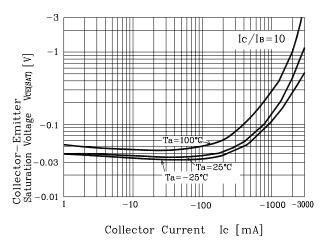


Fig. 5  $h_{FE}\,$  -  $\,I_{C}$ 



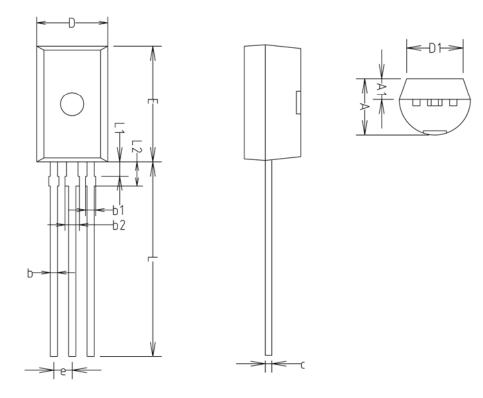






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## **Outline Dimension**



CHARGE	MILLMETERS(mm)			NOTE	
SYMBOL	MINIMUM	NOMINAL	MAXIMUM	NOIL	
A	3.70	3.90	4.10		
A1	1.25	1.45	1.65		
b	0.40	0.50	0.60		
b1	-	_	0.70		
b2	-	-	1.00		
С	0.35	0.45	0.55		
D	4.70	4.90	5.10		
D1	3.70	3.90	4.10		
E	7.80	8.00	8.20		
е	1.27 TYP				
L	13.10	13.50	13.90		
L1	0.90	1.00	1.10		
L2	1.50	1.70	1.90		

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