

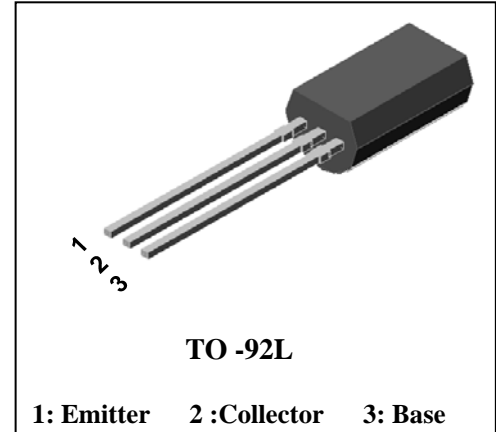
## Descriptions

- Audio power amplifier
- High current application

## Features

- High current :  $I_C=2A$
- Complementary pair with STB1277L

## PIN Connection



## Ordering Information

Type NO.	Marking	Package Code
STD1862L	STD1862	TO-92L

## 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	$BV_{CBO}$	$I_C=100\mu A, I_E=0$	30	-	-	V
Collector-Emitter breakdown voltage	$BV_{CEO}$	$I_C=10mA, I_B=0$	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  $P_C - T_a$

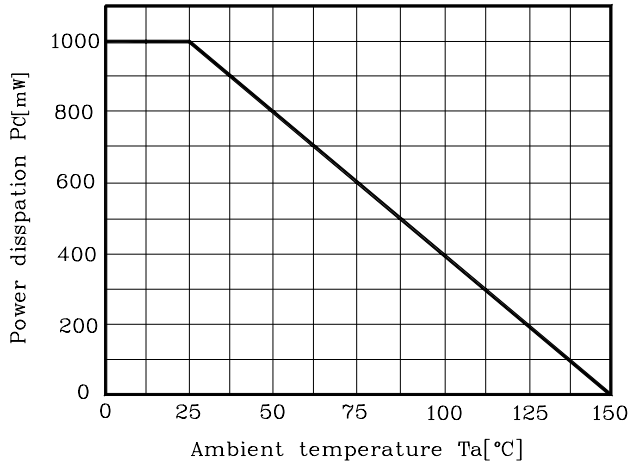


Fig. 2  $I_C - V_{BE}$

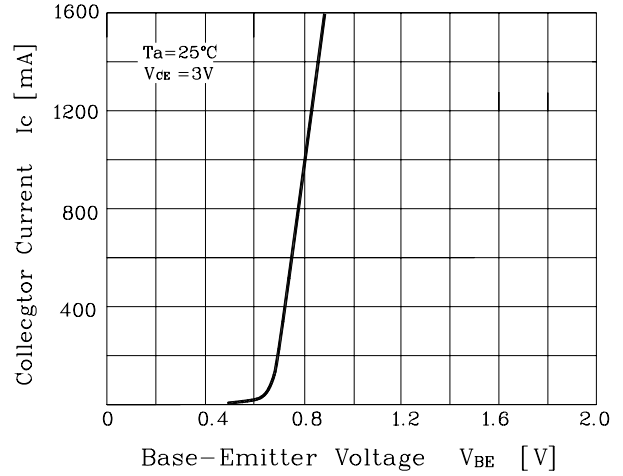


Fig. 3  $I_C - V_{CE}$

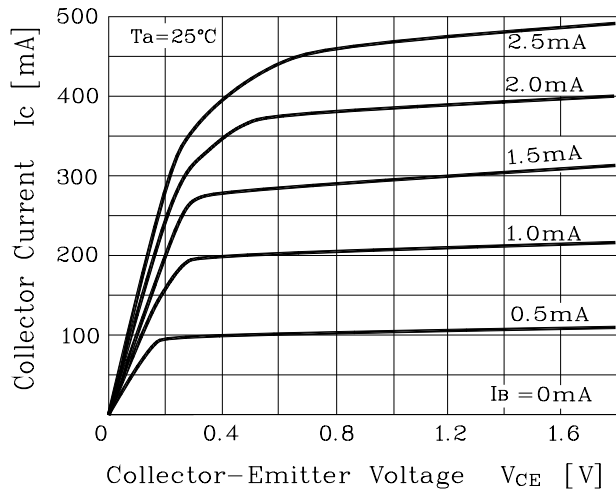


Fig. 4  $V_{CE(sat)} - I_C$

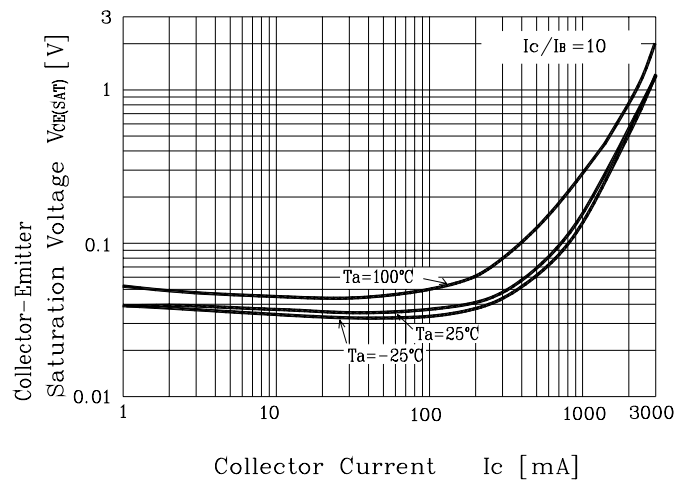
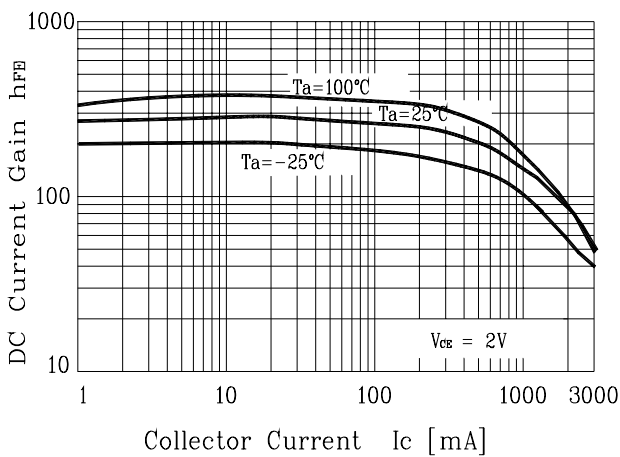
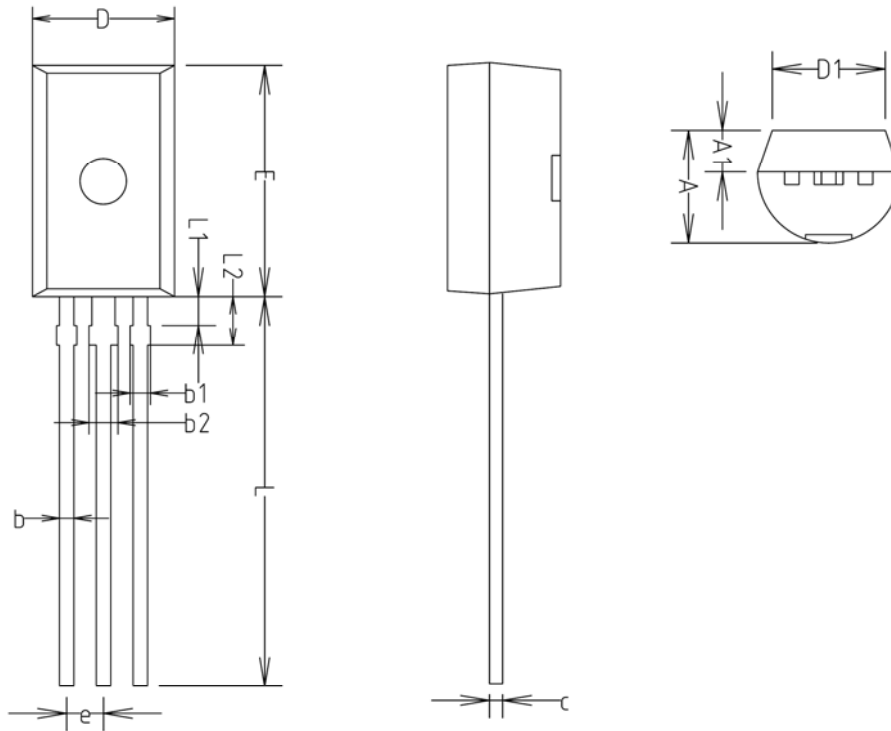


Fig. 5  $h_{FE} - I_C$



## Outline Dimension



SYMBOL	MILLIMETERS(mm)			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
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	
c	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	
e	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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