

## Descriptions

- Audio power amplifier
- High current application

## Features

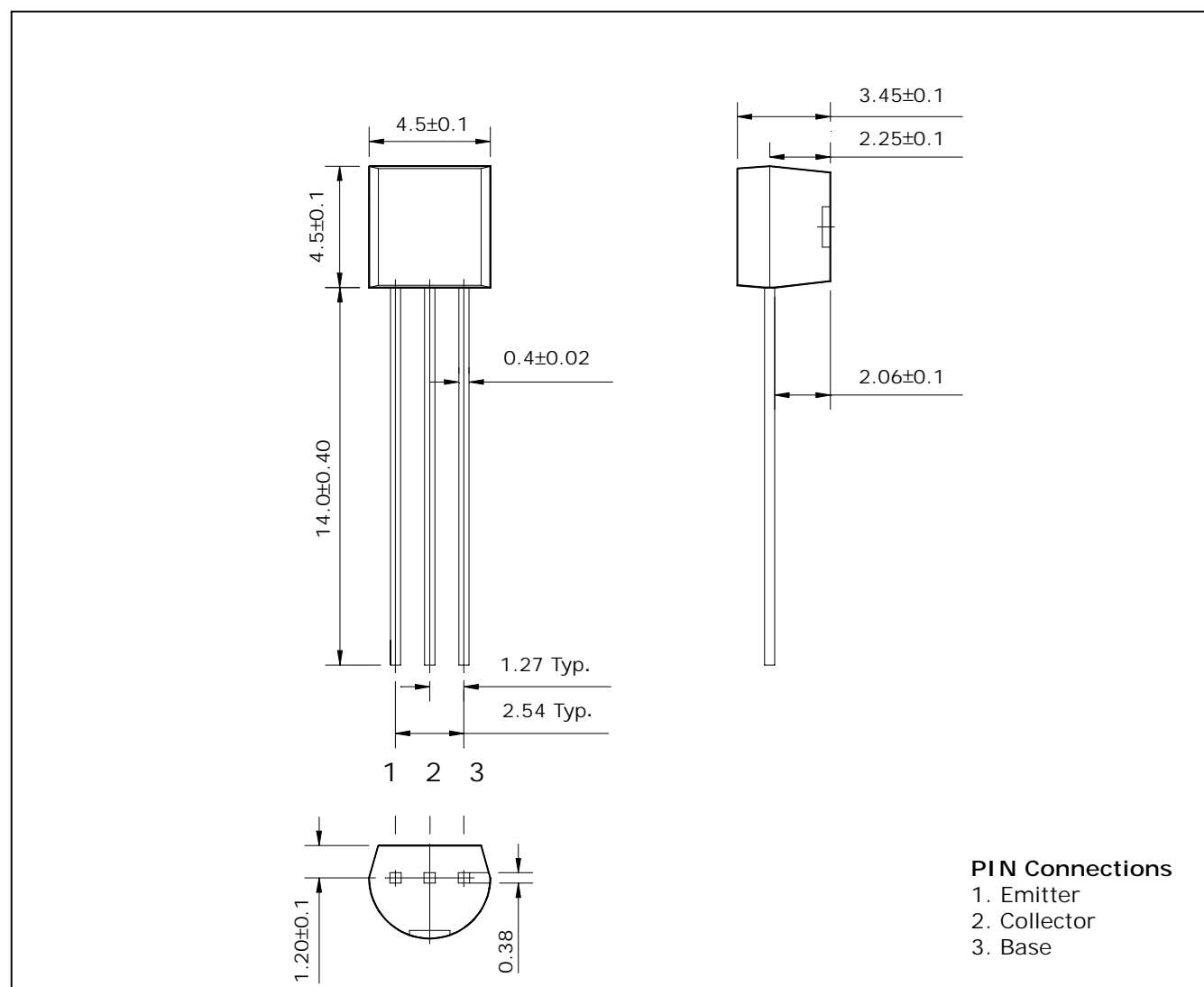
- High current :  $I_C = 2A$
- Complementary pair with STB1277

## Ordering Information

Type NO.	Marking	Package Code
STD1862	STD1862	TO-92

## Outline Dimensions

unit : mm



**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	$P_C$	625	mW
Junction temperature	$T_J$	150	°C
Storage temperature	$T_{stg}$	-55 ~ 150	°C

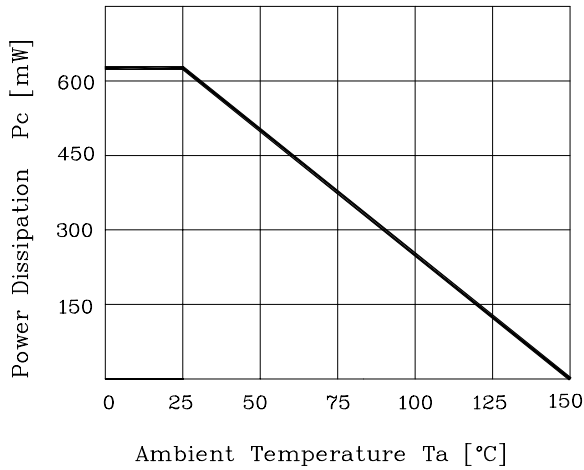
**Electrical Characteristics**
**(Ta=25°C)**

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

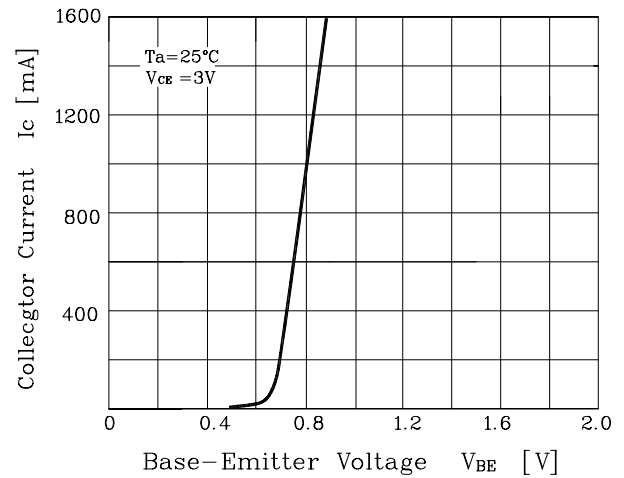
\* :  $h_{FE}$  rank / O : 100~200, Y : 160~320

## Electrical Characteristic Curves

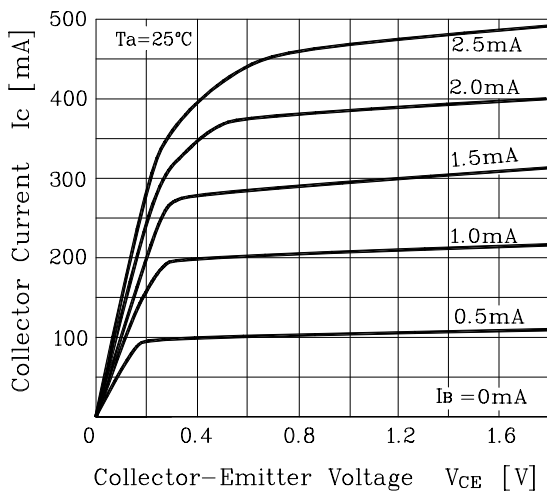
**Fig. 1  $P_C$  -  $T_a$**



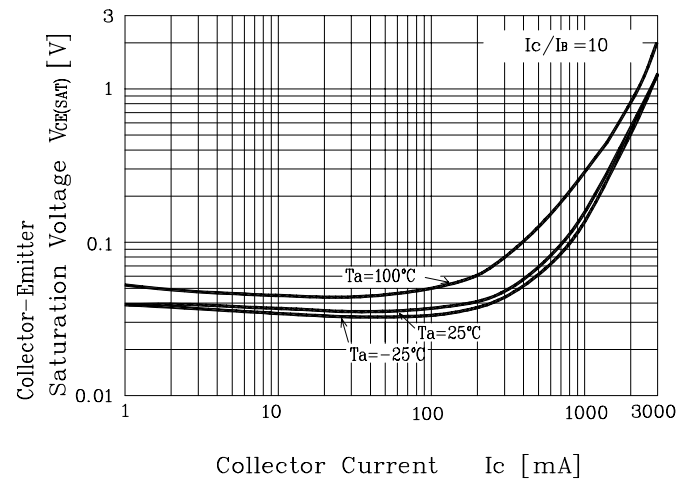
**Fig. 2  $I_C$  -  $V_{BE}$**



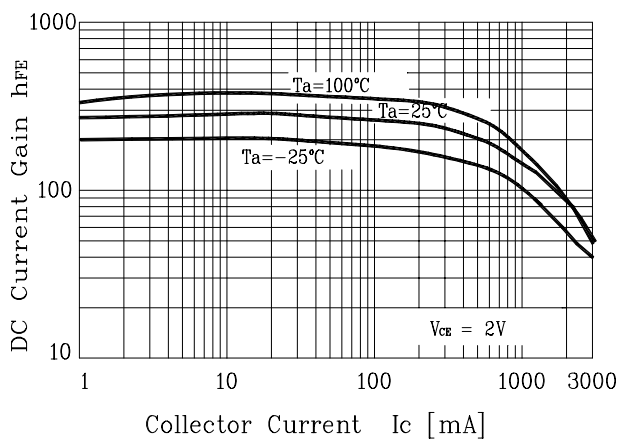
**Fig. 3  $I_C$  -  $V_{CE}$**



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



**Fig. 5  $h_{FE}$  -  $I_C$**



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[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.