

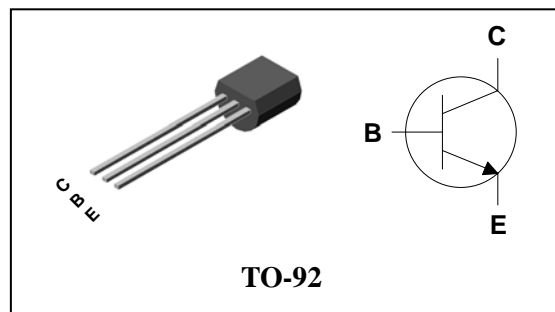
## Descriptions

- High current application
- Switching application

## Features

- Suitable for AF-Driver stage and low power output stages
- Complementary pair with SBC327

## PIN Connection



## Ordering Information

Type NO.	Marking	Package Code
SBC337	SBC337	TO-92

## Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	$V_{CBO}$	50	V
Collector-Emitter voltage	$V_{CEO}$	35	V
Emitter-Base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	800	mA
Collector dissipation	$P_C$	625	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55~150	°C

## Electrical Characteristics

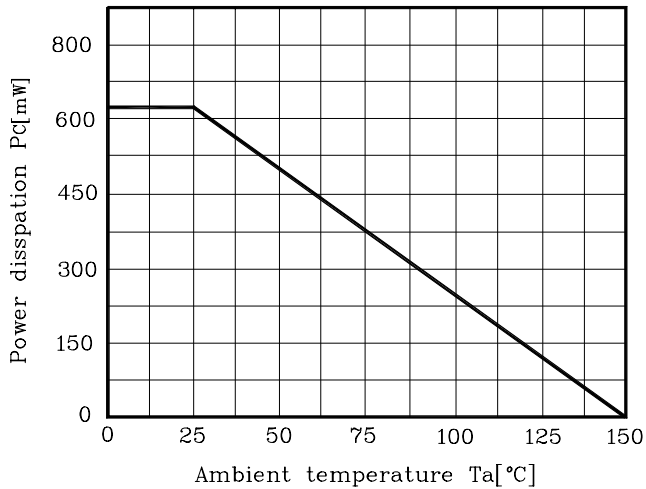
(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Emitter breakdown voltage	$BV_{CEO}$	$I_C=1mA, I_E=0$	35	-	-	V
Base-Emitter turn on voltage	$V_{BE(ON)}$	$V_{CE}=1V, I_C=300mA$	-	-	1.2	V
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$	-	-	700	mV
Collector cut-off current	$I_{CBO}$	$V_{CB}=25V, I_E=0$	-	-	100	nA
DC current gain	$h_{FE}^*$	$V_{CE}=1V, I_C=100mA$	100	-	630	-
Transition frequency	$f_T$	$V_{CB}=5V, I_C=10mA$	-	100	-	MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	16	-	pF

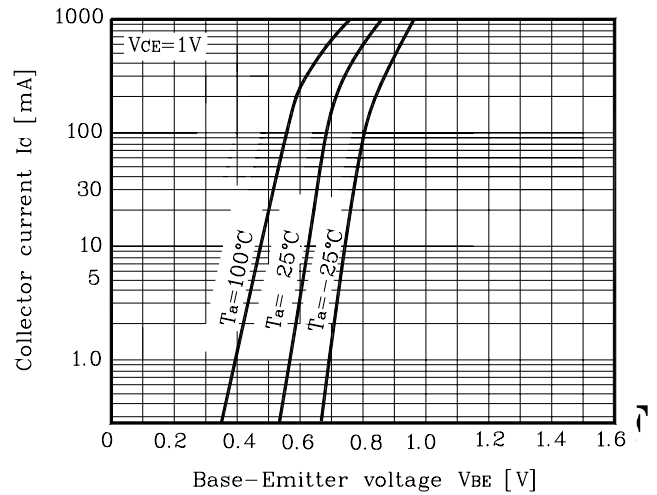
\* :  $h_{FE}$  rank / 16(A) : 100 ~ 250, 25(B) : 160 ~ 400, 40(C) : 250 ~ 630

## Electrical Characteristic Curves

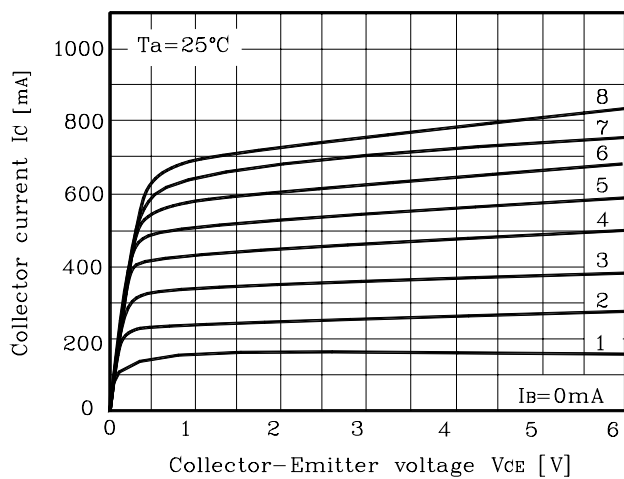
**Fig. 1  $P_C$ - $T_a$**



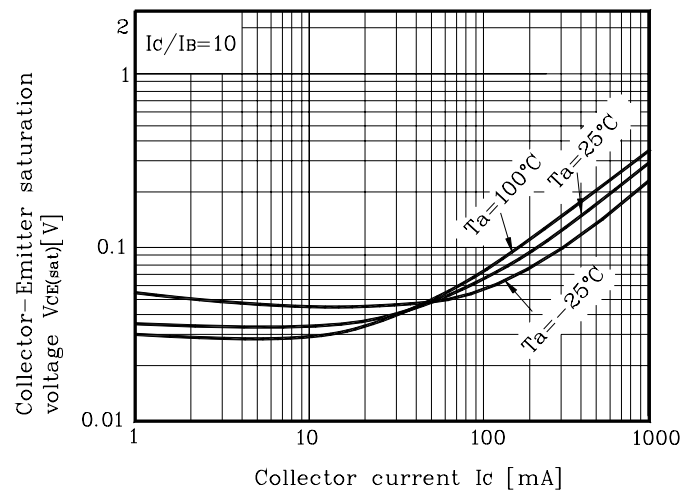
**Fig. 2  $I_C$  -  $V_{BE}$**



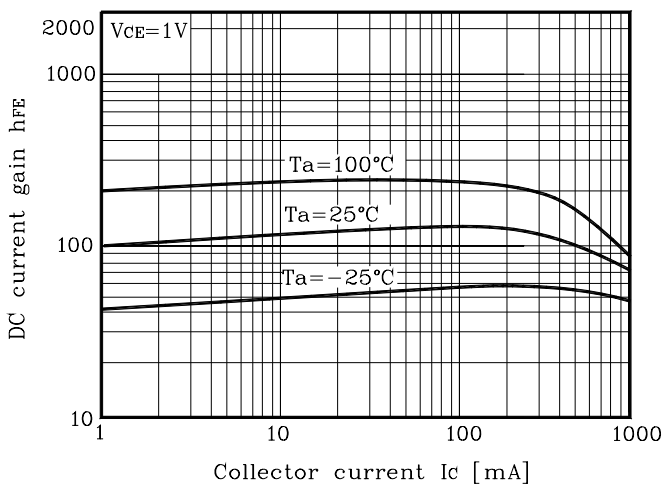
**Fig. 3  $I_C$  -  $V_{CE}$**



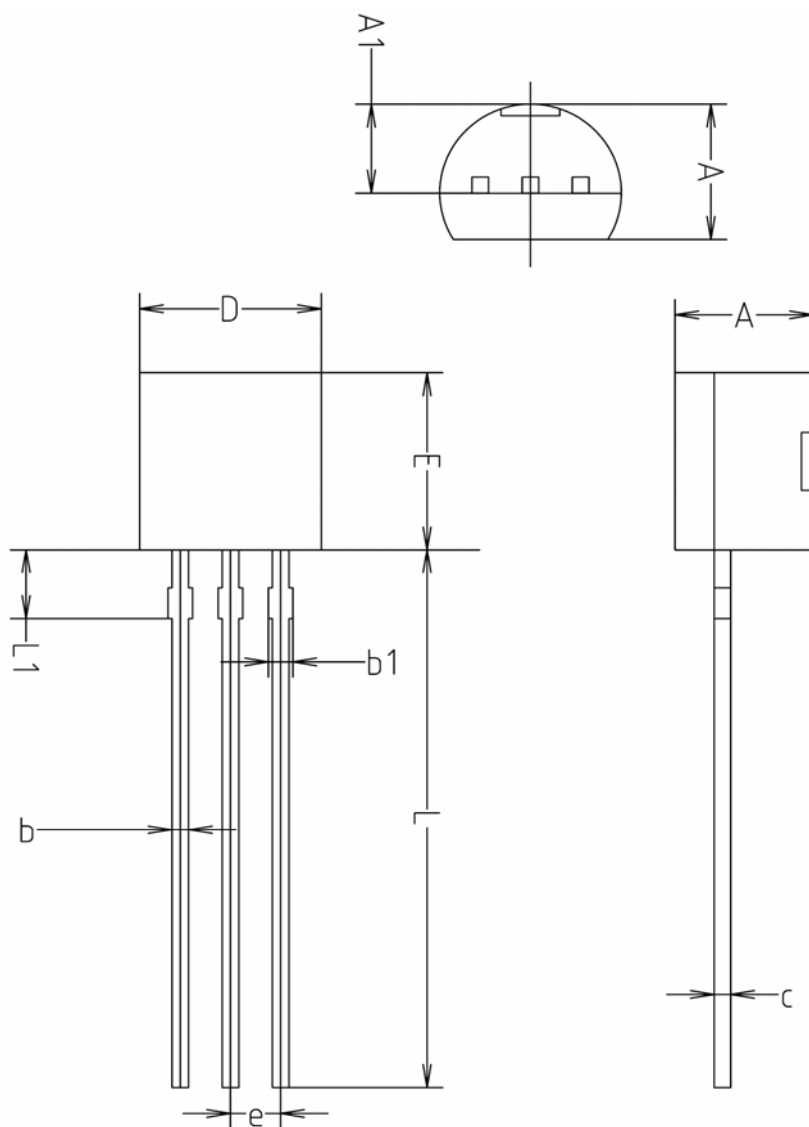
**Fig. 4  $V_{CE(sat)}$  -  $I_C$**



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



## Outline Dimension



SYMBOL	MILLMETERS(mm)		
	MINIMUM	NOMINAL	MAXIMUM
A	3.40	3.50	3.66
A1	2.46	2.51	2.59
b	0.39	0.44	0.53
b1	0.39	—	0.63
c	0.35	0.42	0.47
D	4.48	4.60	4.70
E	4.48	4.60	4.70
e	1.17	1.27	1.37
L	13.70	14.00	14.77
L1	1.55	1.70	2.15

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