



## **Description**

• Audio power amplifier application

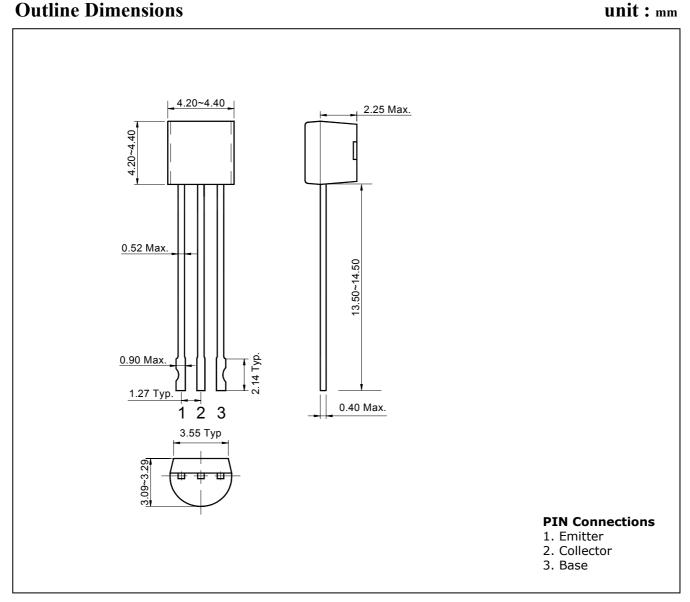
### **Features**

- High DC current gain :  $h_{FE}=100\sim320$
- Complementary pair with 2SA1981N

## **Ordering Information**

Type NO.	Marking	Package Code		
2SC5344N	C5344	TO-92N		

### **Outline Dimensions**



#### KSD-T0C032-000

# **Absolute Maximum Ratings**

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	35	V
Collector-emitter voltage	$V_{CEO}$	30	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_{C}$	800	mA
Collector power dissipation	$P_{C}$	400	mW
Junction temperature	T <sub>1</sub>	150	°C
Storage temperature range	$T_{stg}$	-55~150	°C

# **Electrical Characteristics**

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-emitter breakdown voltage	BV <sub>CEO</sub>	$I_C=1$ mA, $I_B=0$	30	1	-	V
Collector cut-off current	$I_{CBO}$	$V_{CB} = 35V, I_{E} = 0$	-	1	0.1	μА
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V$ , $I_C=0$	-	-	0.1	μА
DC current gain	h <sub>FE</sub> *	V <sub>CE</sub> =1V, I <sub>C</sub> =100mA	100	-	320	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA	-	1	0.5	V
Base-emitter voltage	$V_{BE}$	V <sub>CE</sub> =1V, I <sub>C</sub> =100mA	-	0.7	0.9	V
Transition frequency	$f_T$	V <sub>CE</sub> =5V, I <sub>C</sub> =10mA	-	180	-	MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB}=10V$ , $I_{E}=0$ , $f=1MHz$	-	13	1	pF

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

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### **Electrical Characteristic Curves**

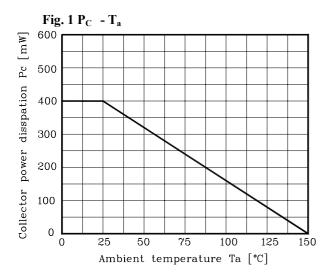


Fig. 3  $I_C$  -  $V_{CE}$ 

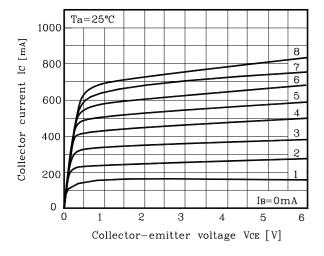


Fig. 5  $h_{FE}$  -  $I_{C}$ 

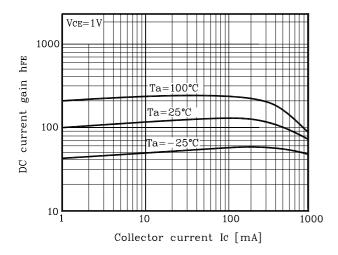


Fig. 2  $I_C$  -  $V_{BE}$ 

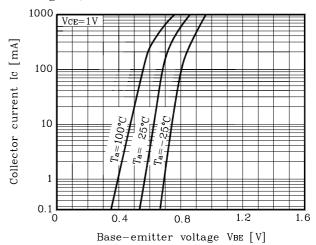
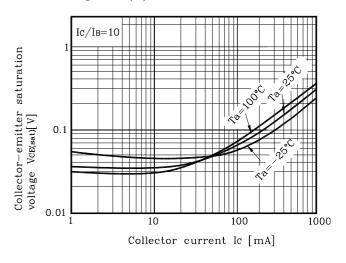


Fig. 4  $V_{CE(sat)}$  -  $I_{C}$ 



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