

**NPN Silicon Transistor** 

### Description

• Audio power amplifier application

### **Features**

• High  $h_{FE}$  :  $h_{FE} = 100 \sim 320$ 

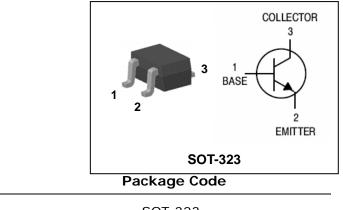
**Ordering Information** 

Type NO.

2SC5344U

• Complementary pair with 2SA1981U

### **PIN Connection**



SOT-323

1 Device Code 2 hFE Rank 3 Year&Week Code

Marking

<u>F</u> \_\_\_\_

123

#### Absolute maximum ratings

Absolute maximum ratings			(Ta=25°C)
Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V <sub>CBO</sub>	35	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>	800	mA
Collector dissipation	Pc	200	mW
Junction temperature	Tj	150	°C
Storage temperature	T <sub>stg</sub>	-55~150	°C

### **Electrical Characteristics**

Electrical Characteristics (Ta=2						=25°C)
Characteristic	Symbol	<b>Test Condition</b>	Min.	Тур.	Max.	Unit
Collector-Base breakdown voltage	$BV_{CBO}$	$I_{C} = 100 \mu A, I_{E} = 0$	35	-	-	V
Collector-Emitter breakdown voltage	BV <sub>CEO</sub>	$I_{C}=1mA$ , $I_{B}=0$	30	-	-	V
Emitter-Base breakdown voltage	BV <sub>EBO</sub>	$I_{E} = 10 \mu A$ , $I_{C} = 0$	5	-	-	V
Collector cut-off current	I <sub>CBO</sub>	$V_{CB} = 35V, I_E = 0$	-	-	0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	$V_{EB}$ =5V, $I_{C}$ =0	-	-	0.1	μA
DC current gain	h <sub>FE</sub> *	$V_{CE}$ =1V, $I_C$ =100mA	100	-	320	_
Collector-Emitter saturation voltage	V <sub>CE(sat)</sub>	$I_{C}$ =500mA, $I_{B}$ =50mA	-	-	0.5	V
Transition frequency	f <sub>T</sub>	$V_{CE}$ =5V, $I_{C}$ =10mA	-	120	-	MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB}$ =10V, $I_E$ =0, f=1MHz	-	13	-	pF

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

### **Electrical Characteristic Curves**

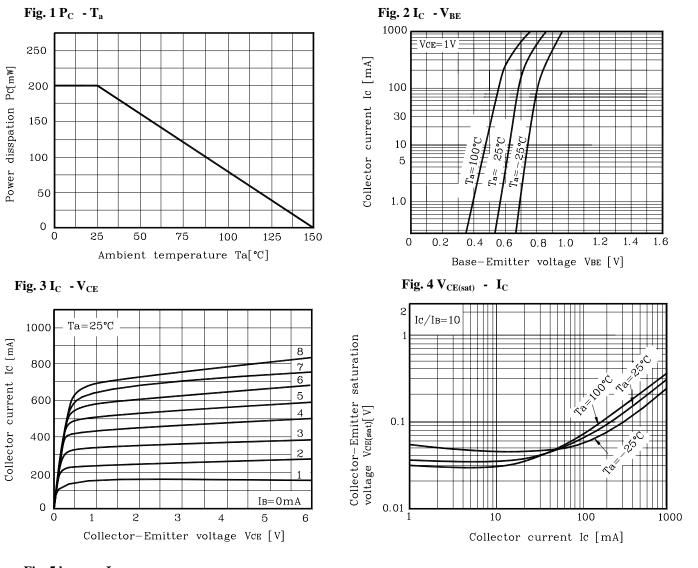
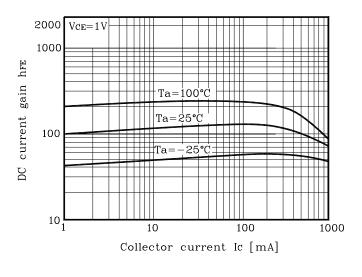
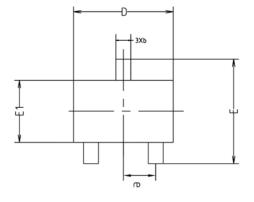
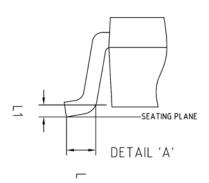


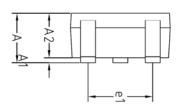
Fig. 5  $h_{FE}\,$  -  $\,I_{C}$ 

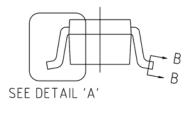


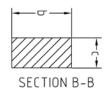
## **Outline Dimension**





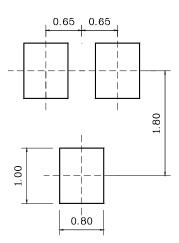






SYMBOL	1	NOTE			
STRIDUL	MINIMUM	NOMINAL	MAXIMUM	NUTE	
A	0.90	-	1.25		
A1	0.00	-	0.10		
A2	0.85	0.90	0.95		
b	0.30	-	0.40		
с	0.10	-	0.25		
D	1.90	2.00	2.10		
E	1.95	2.10	2.25		
E1	1.15	1.25	1.35		
е					
e1	1.20	-	1.40		
L	0.10	-	-		
L1					

#### \*Recommend PCB solder land [Unit: mm]



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