

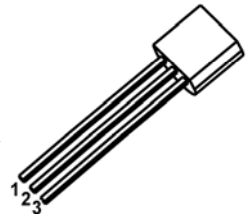
TRANSISTOR (NPN)

FEATURES

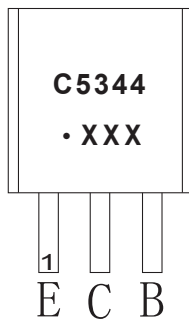
- Audio Power Amplifier Application
- High h_{FE} : $h_{FE}=100\sim320$
- Complementary to 2SA1981

TO-92

1. EMITTER
2. COLLECTOR
3. BASE



MARKING

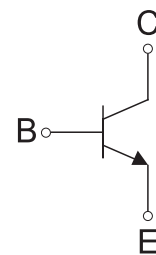


C5344=Device code

Solid dot=Green molding compound device,
if none, the normal device

XXX=Code

Equivalent Circuit



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SC5344	TO-92	Bulk	1000pcs/Bag
2SC5344-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	35	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	800	mA
P_C	Collector Power Dissipation	625	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$



ELECTRICAL CHARACTERISTICS

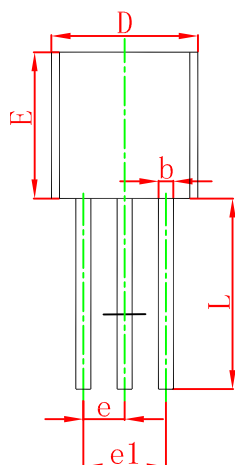
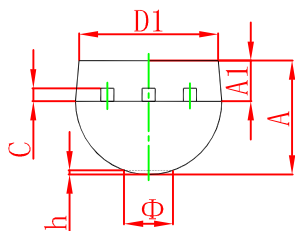
 $T_a=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1\text{mA}, I_B=0$	35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{mA}, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 0.01\text{mA}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=35\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}= 5\text{V}, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=1\text{V}, I_C= 100\text{mA}$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C= 500\text{mA}, I_B=50\text{mA}$			0.5	V
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=10\text{mA}$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E= 0, f=1\text{MHz}$		13		pF

CLASSIFICATION OF h_{FE}

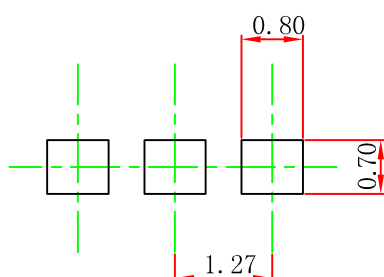
Rank	O	Y
Range	100-200	160-320

TO-92 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.300	4.700	0.169	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

TO-92 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.