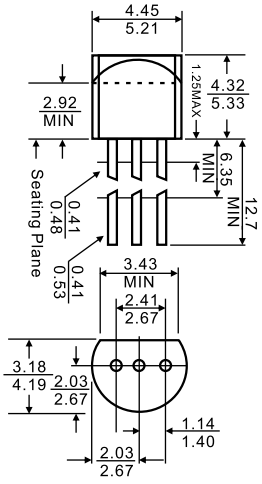
2SC5344(NPN)

TO-92 Bipolar Transistors

RoHS COMPLIANT

1. EMITTER
2. COLLECTOR
3. BASE

TO-92



Dimensions in inches and (millimeters)

Features

- ✧ Audio power amplifier application
- ✧ High h_{FE} : h_{FE}=100~320
- ✧ Complementary to 2SA1981

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
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	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

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

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	100-200	160-320

Typical Characteristics

Fig. 1 P_C - T_a

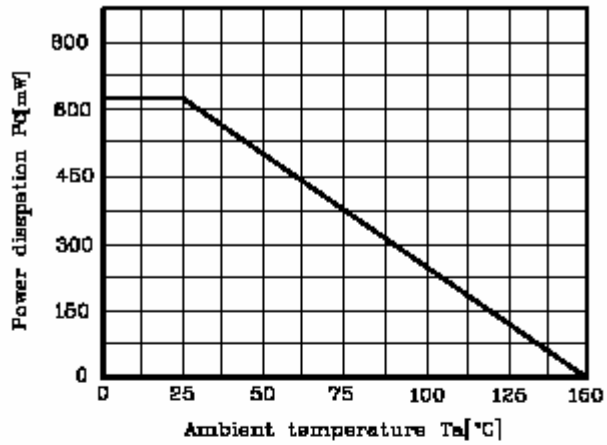


Fig. 2 I_C - V_{BE}

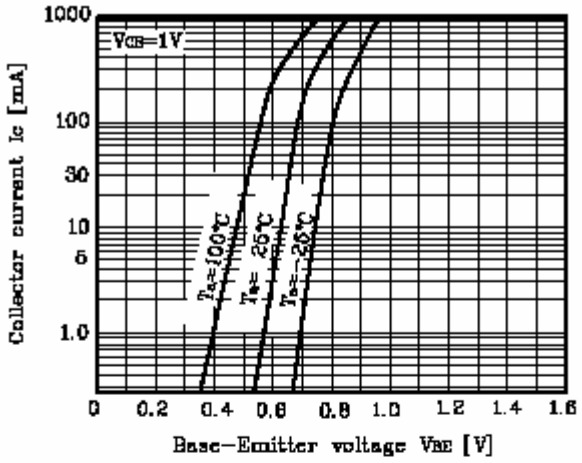


Fig. 3 I_C - V_{CE}

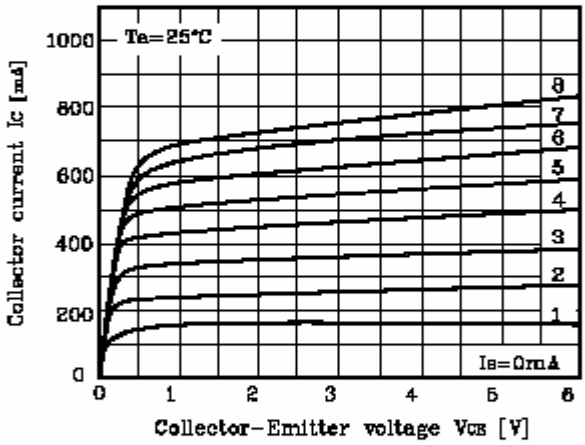


Fig. 4 $V_{CE(sat)}$ - I_C

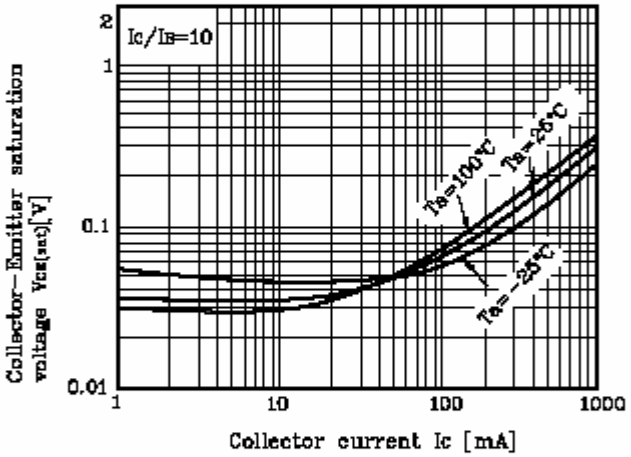


Fig. 5 h_{FE} - I_C