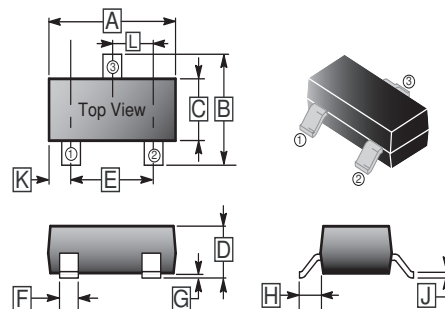


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Audio power amplifier application
- High  $h_{FE}=100\sim320$
- Complementary to 2SA1981

## SOT-23



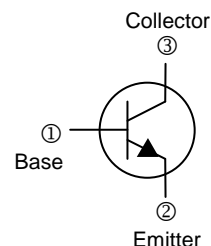
## CLASSIFICATION OF $h_{FE(1)}$

Product-Rank	2SC5344-O	2SC5344-Y
Range	100~200	160~320
Marking Code	FAO	FAY

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.04	G	0.09	0.18
B	2.10	2.55	H	0.45	0.60
C	1.20	1.40	J	0.08	0.177
D	0.89	1.15	K	0.6 REF.	
E	1.78	2.04	L	0.89	1.02
F	0.30	0.50			

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch



## ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	$V_{CB0}$	35	V
Collector to Emitter Voltage	$V_{CE0}$	30	V
Emitter to Base Voltage	$V_{EB0}$	5	V
Collector Current - Continuous	$I_C$	800	mA
Collector Power Dissipation	$P_C$	200	mW
Junction, Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CB0}$	35	-	-	V	$I_C=100\mu\text{A}, I_B=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CE0}$	30	-	-	V	$I_C=10\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EB0}$	5	-	-	V	$I_E=10\mu\text{A}, I_C=0$
Collector Cut-Off Current	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB}=35\text{V}, I_E=0$
Emitter Cut-Off Current	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB}=5\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	100	-	320		$V_{CE}=1\text{V}, I_C=100\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.5	V	$I_C=500\text{mA}, I_B=50\text{mA}$
Transition Frequency	$f_T$	-	120	-	MHz	$V_{CE}=5\text{V}, I_C=10\text{mA}$
Collector Output Capacitance	$C_{ob}$	-	13	-	pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$

**CHARACTERISTIC CURVES**

Fig. 1  $P_C - T_a$

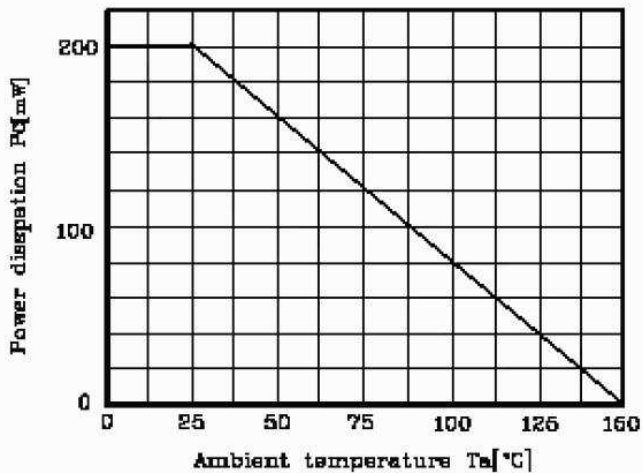


Fig. 2  $I_C - V_{BE}$

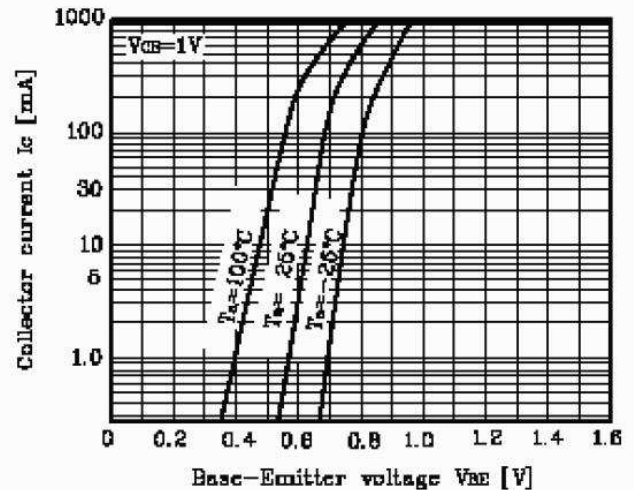


Fig. 3  $I_C - V_{CE}$

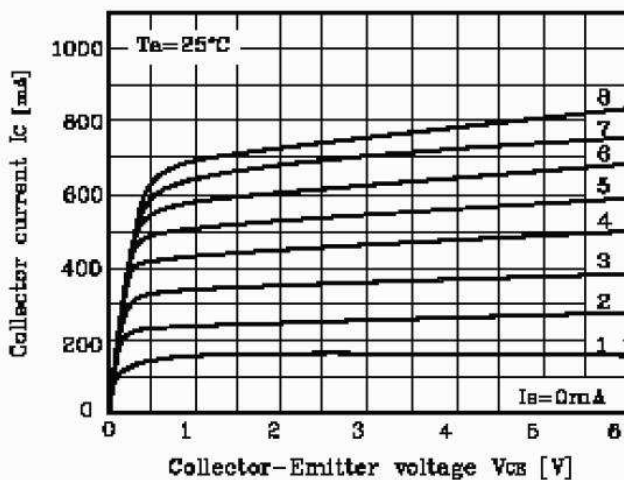


Fig. 4  $V_{CE(sat)} - I_C$

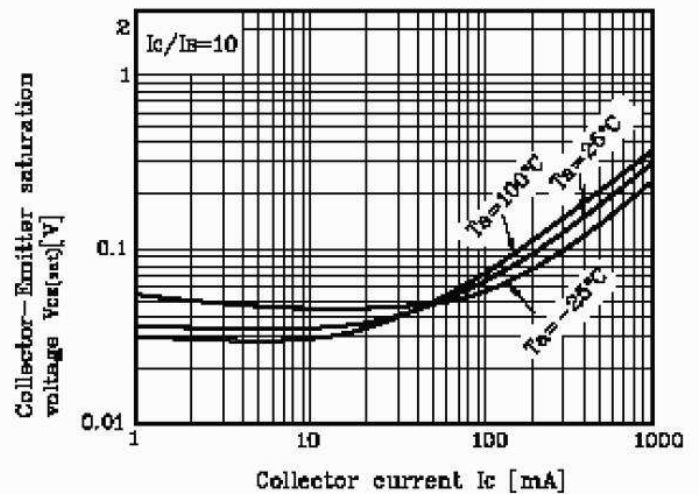
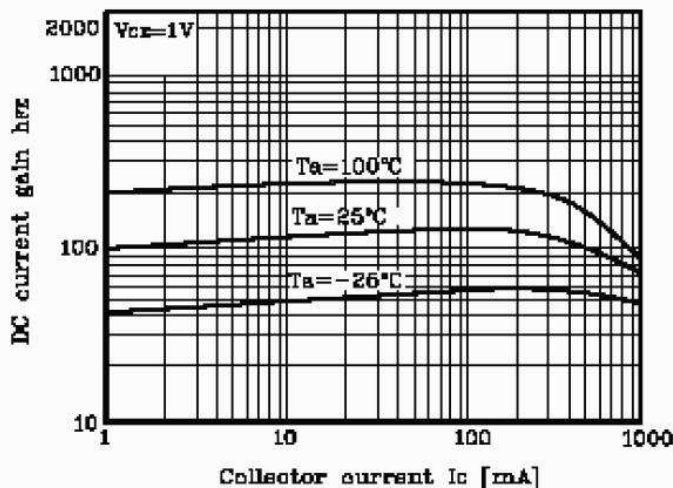


Fig. 5  $h_{FE} - I_C$



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