

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

FEATURES

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

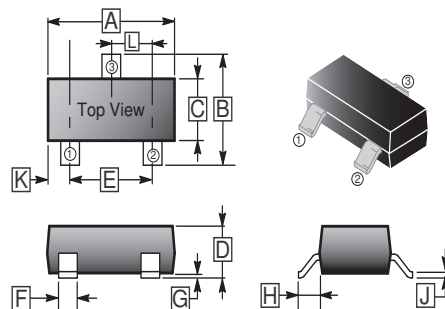
CLASSIFICATION OF $h_{FE(1)}$

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

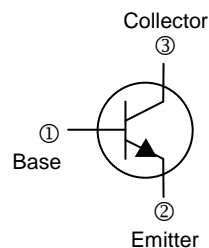
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

SOT-23



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			



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	μA	$V_{CB}=35\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	$V_{EB}=5\text{V}, I_C=0$
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 $P_C - T_a$

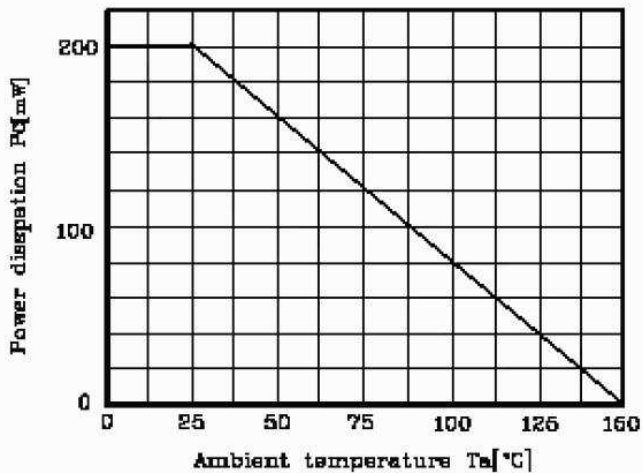


Fig. 2 $I_C - V_{BE}$

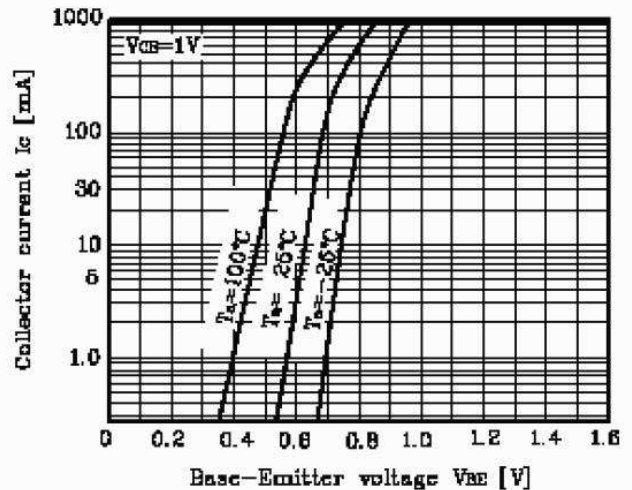


Fig. 3 $I_C - V_{CE}$

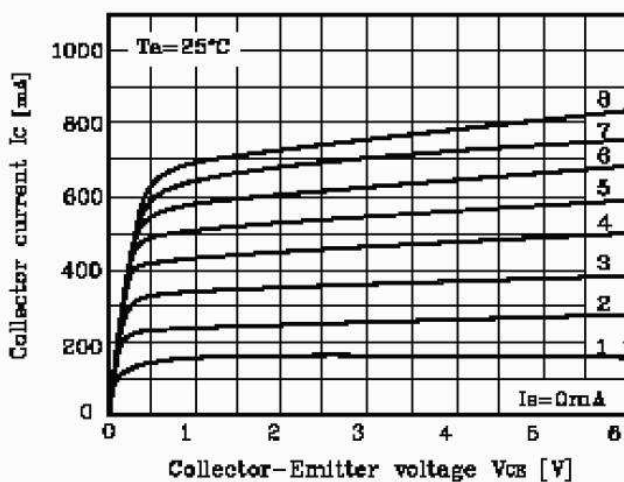


Fig. 4 $V_{CE(sat)} - I_C$

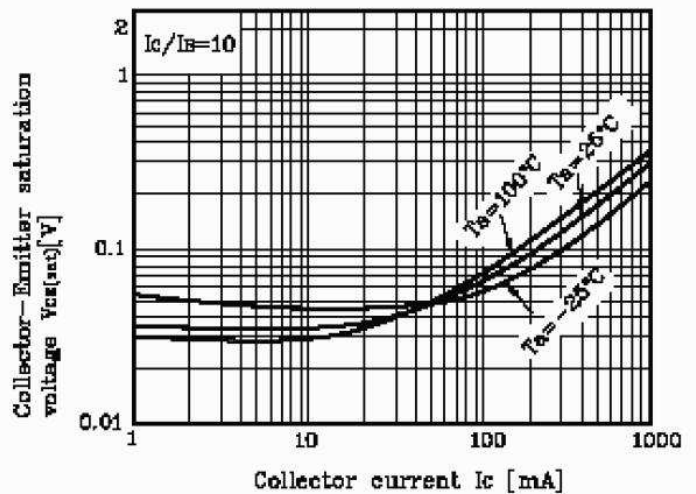


Fig. 5 $h_{FE} - I_C$

