

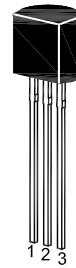
ST 2SC5344

NPN Silicon Epitaxial Planar Transistor

Audio power amplifier applications.

The transistor is subdivided into two groups O and Y according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

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

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE} = 1\text{ V}$, $I_C = 100\text{ mA}$	Current Gain Group O	h_{FE}	100	-	200	-
	Y	h_{FE}	160	-	320	-
Collector Base Cutoff Current at $V_{CB} = 35\text{ V}$	I_{CBO}	-	-	0.1	μA	
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	I_{EBO}	-	-	0.1	μA	
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	V_{CBO}	35	-	-	V	
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	V_{CEO}	30	-	-	V	
Emitter Base Breakdown Voltage at $I_E = 10\text{ }\mu\text{A}$	V_{EBO}	5	-	-	V	
Collector-Emitter Saturation Voltage at $I_C = 500\text{ mA}$, $I_B = 50\text{ mA}$	$V_{CE(sat)}$	-	-	0.5	V	
Transition Frequency at $V_{CE} = 5\text{ V}$, $I_C = 10\text{ mA}$	f_T	-	120	-	MHz	
Collector Output Capacitance at $V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	13	-	pF	

Fig. 1 $P_c - T_a$

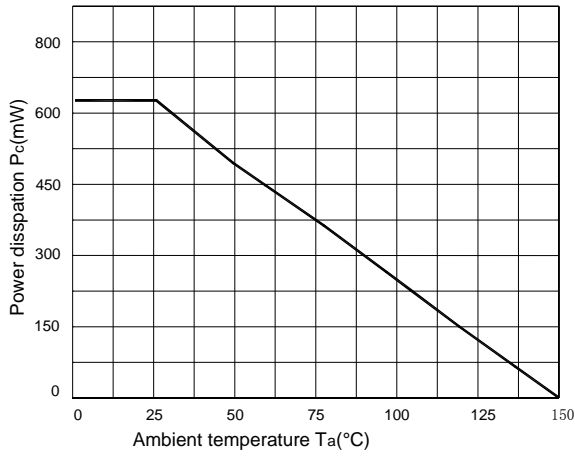


Fig. 2 $I_c - V_{BE}$

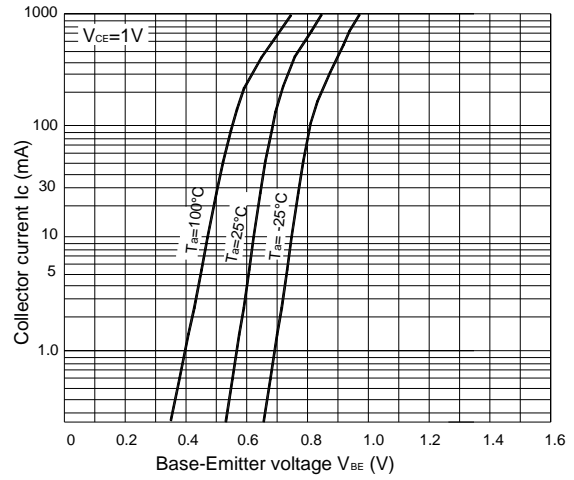


Fig. 3 $I_c - V_{CE}$

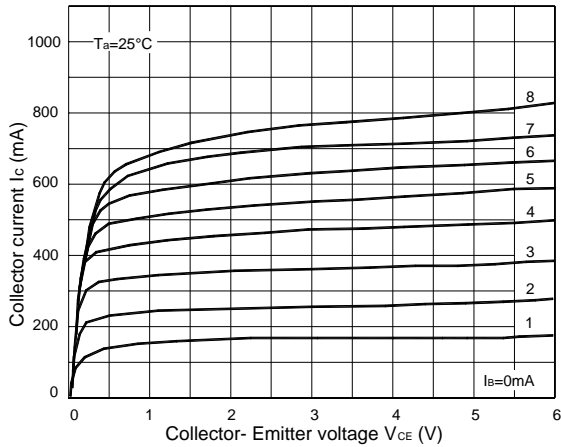


Fig. 4 $V_{CE(sat)} - I_c$

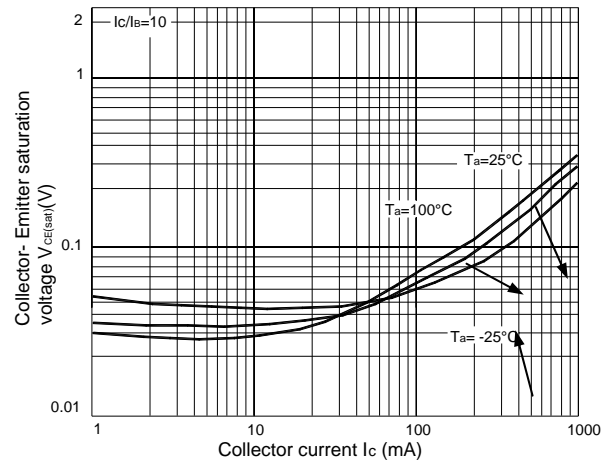
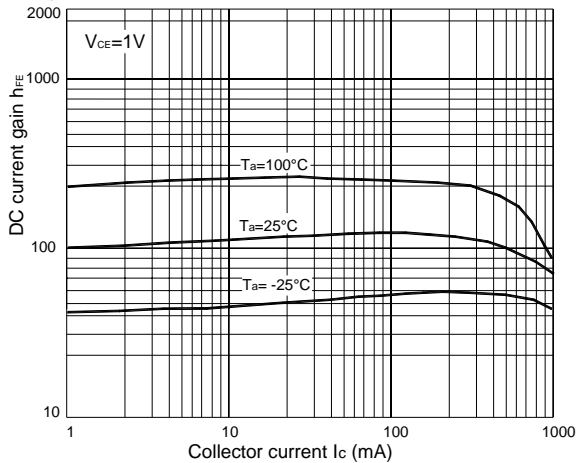


Fig. 5 $h_{FE} - I_c$



www.s-manuals.com