

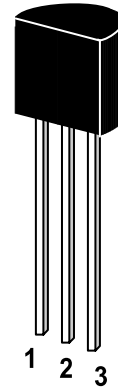
# ST 2SC5344

## 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.

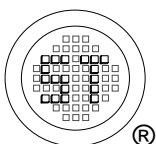


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package  
Weight approx. 0.19g

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

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



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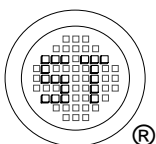


Dated : 08/12/2003

# ST 2SC5344

## Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=1\text{V}$ , $I_C=100\text{mA}$	O	$h_{FE}$	100	-	200	-
	Y	$h_{FE}$	160	-	320	-
Collector-Base Breakdown Voltage at $I_C=100\mu\text{A}$ ,		$V_{CBO}$	35	-	-	V
Collector-Emitter Breakdown Voltage at $I_C=10\text{mA}$ ,		$V_{CEO}$	30	-	-	V
Emitter-Base Breakdown Voltage at $I_E=10\mu\text{A}$ ,		$V_{EBO}$	5	-	-	V
Collector Cut-off Current at $V_{CB}=35\text{V}$ ,		$I_{CBO}$	-	-	0.1	$\mu\text{A}$
Emitter Cut-off Current at $V_{EB}=5\text{V}$ ,		$I_{EBO}$	-	-	0.1	$\mu\text{A}$
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



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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116

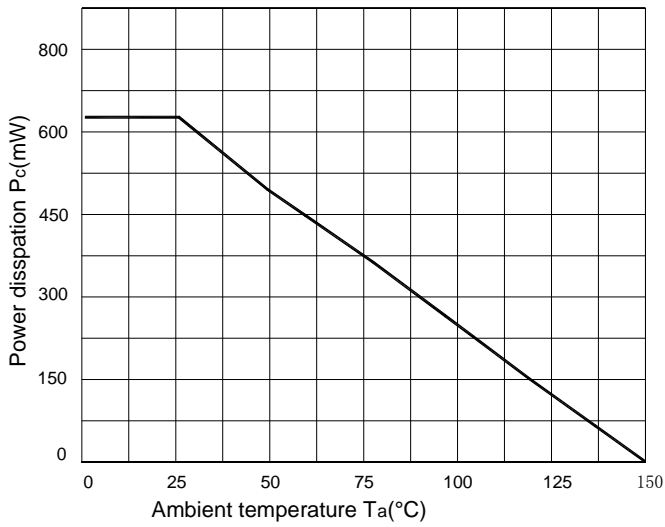


ISO 9001:2000  
Certificate No. 0506098

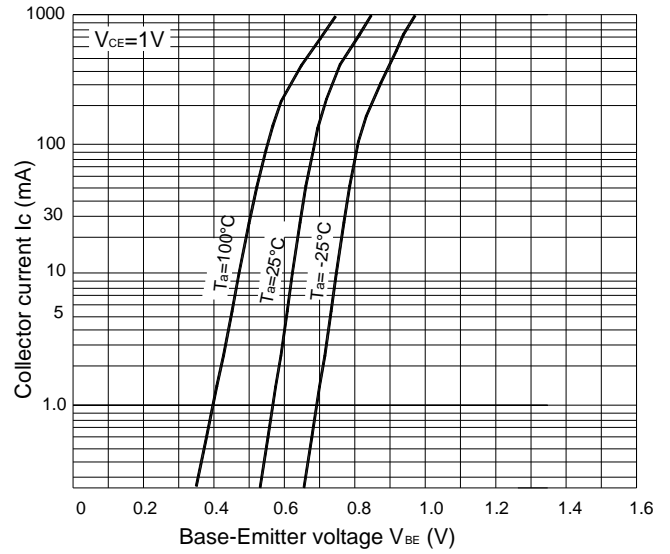
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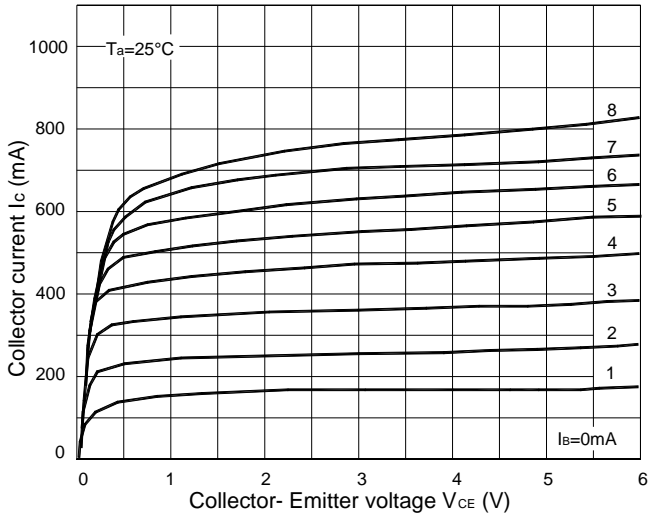
**Fig. 1 P<sub>c</sub> - T<sub>a</sub>**



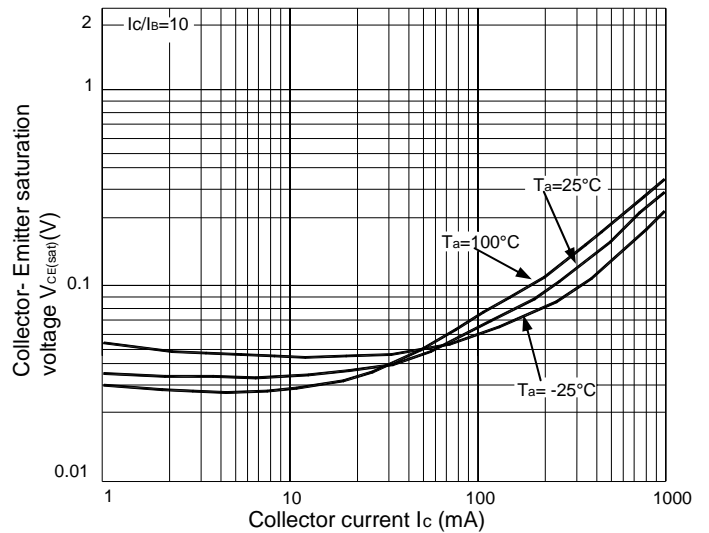
**Fig. 2 I<sub>c</sub> - V<sub>BE</sub>**



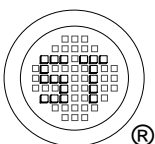
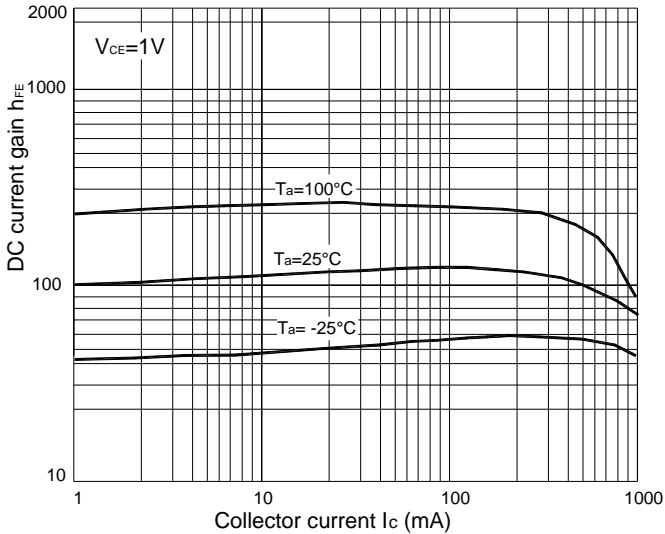
**Fig. 3 I<sub>c</sub> - V<sub>CE</sub>**



**Fig. 4 V<sub>CE(sat)</sub> - I<sub>c</sub>**



**Fig.5 h<sub>FE</sub> - I<sub>c</sub>**



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