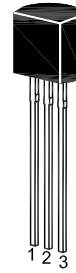


2SB985

PNP Silicon Epitaxial Planar Transistor

for use in driver and output stages of audio frequency amplifiers.

The transistor is subdivided into three groups A, B and C according to its DC current gain.



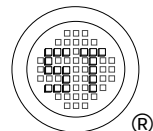
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	6	V
Collector Current	$-I_C$	3	A
Collector Current (Pulse)	$-I_{CP}$	6	A
Power Dissipation	P_{tot}	1	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 2\text{ V}$, $-I_C = 100\text{ mA}$ at $-V_{CE} = 2\text{ V}$, $-I_C = 3\text{ A}$ Current Gain Group	A	h_{FE}	100	-	-
	B	h_{FE}	140	-	-
	C	h_{FE}	200	-	-
		h_{FE}	35	-	-
Collector Base Cutoff Current at $-V_{CB} = 40\text{ V}$	$-I_{CBO}$	-	-	1	μA
Collector Emitter Cutoff Current at $-V_{EB} = 4\text{ V}$	$-I_{EBO}$	-	-	1	μA
Collector Emitter Saturation Voltage at $-I_C = 2\text{ A}$, $-I_B = 100\text{ mA}$	$-V_{CE(sat)}$	-	-	0.7	V
Base Emitter Saturation Voltage at $-I_C = 2\text{ A}$, $-I_B = 100\text{ mA}$	$-V_{BE(sat)}$	-	-	1.2	V
Gain Bandwidth Product at $-V_{CE} = 10\text{ V}$, $-I_C = 50\text{ mA}$	f_T	-	150	-	MHz
Collector Base Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	39	-	pF



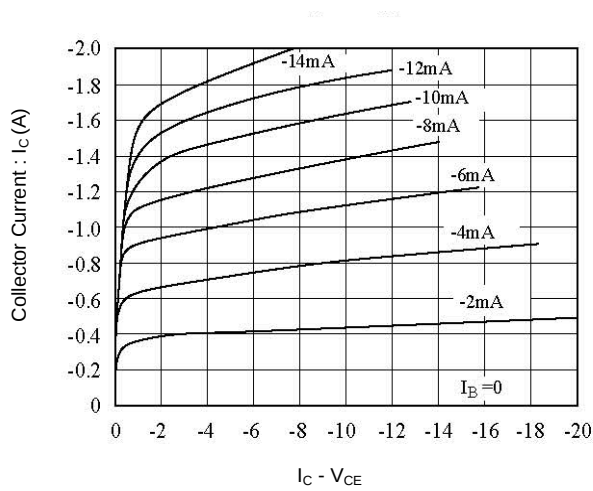


Figure 1. Collector Emitter Voltage V_{CE} (V)

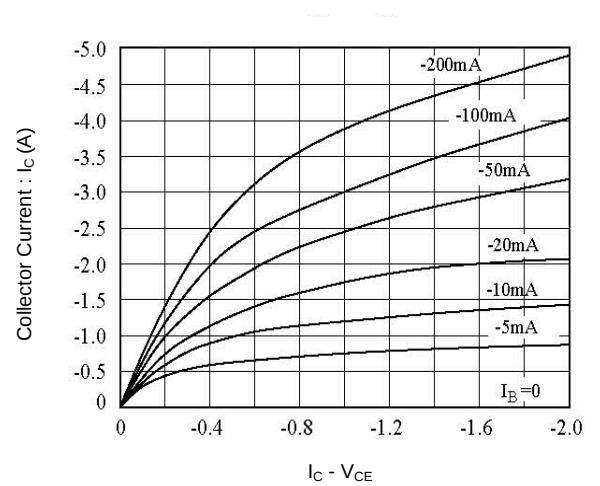


Figure 2. Collector Emitter Voltage V_{CE} (V)

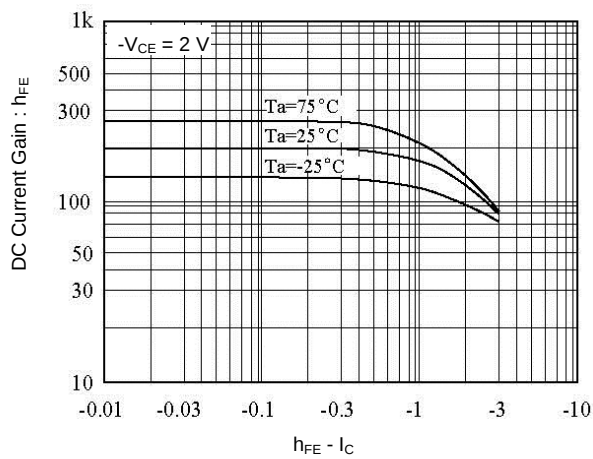


Figure 3. Collector Current I_C (A)

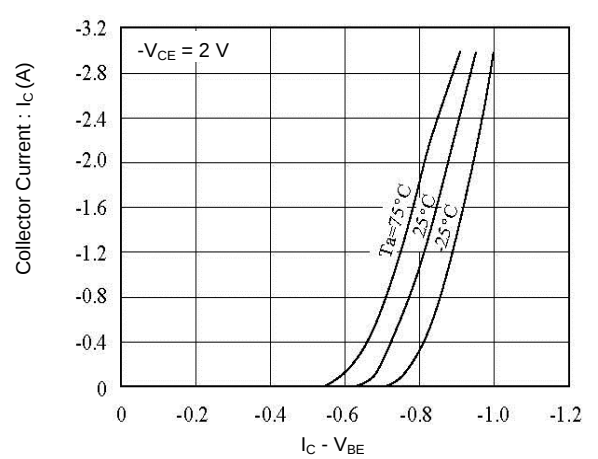


Figure 4. Base Emitter Voltage V_{BE} (V)

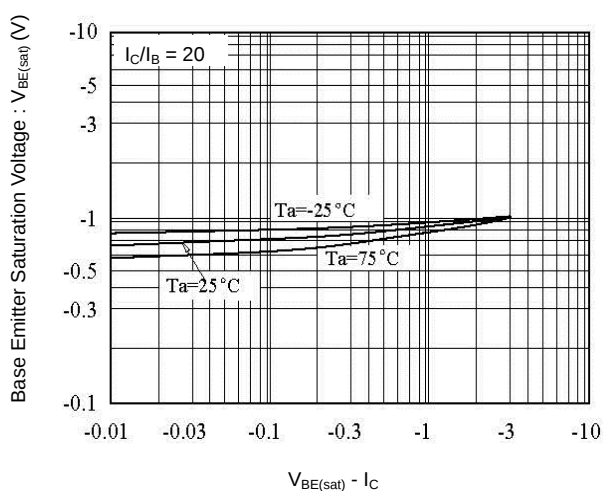


Figure 5. Collector Current I_C (A)

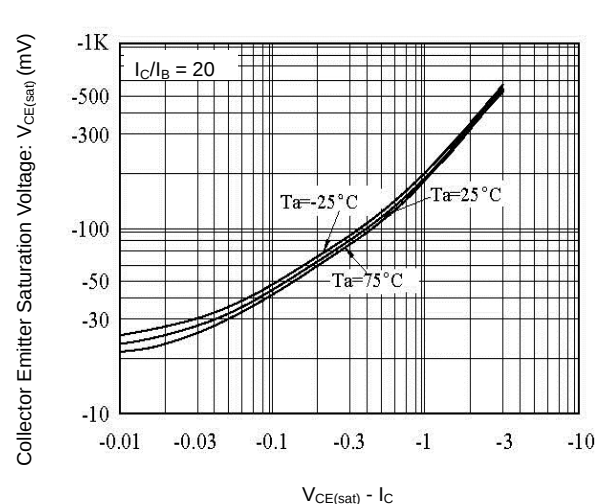


Figure 6. Collector Current I_C (A)

