2SC3203 NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into tow group, O And Y and 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

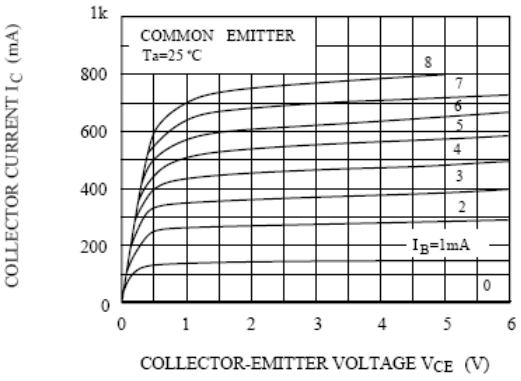
Absolute Maximum Ratings (T_a = 25 °C)

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
Emitter Current	I_E	-800	mA
Power Dissipation	P_{tot}	600	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

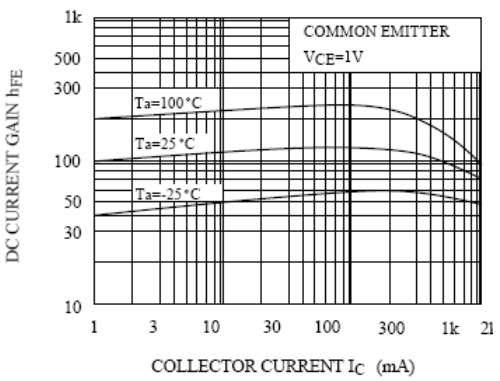
Characteristics at T_a = 25 °C

Parameter			Symbol	Min.	Typ.	Max.	Unit
DC Current Gain							
at V_{CE} = 1 V, I_C = 100 mA	Current Gain Group	O	h_{FE}	100	-	200	-
		Y	h_{FE}	160	-	320	-
at V_{CE} = 1 V, I_C = 700 mA			h_{FE}	35	-	-	-
Collector Base Cutoff Current at V_{CB} = 35 V			I_{CBO}	-	-	0.1	µA
Emitter Base Cutoff Current at V_{EB} = 5 V			I_{EBO}	-	-	0.1	µA
Collector Emitter Breakdown Voltage at I_C = 10 mA			$V_{(BR)CEO}$	30	-	-	V
Collector Emitter Saturation Voltage at I_C = 500 mA, I_B = 20 mA			$V_{CE(sat)}$	-	-	0.5	V
Base Emitter Voltage at I_C = 10 mA, V_{CE} = 1 V			V_{BE}	0.5	-	0.8	V
Transition Frequency at V_{CE} = 5 V, I_C = 10 mA			f_T	-	120	-	MHz
Collector Output Capacitance at V_{CB} = 10 V, f = 1 MHz			C_{ob}	-	13	-	pF

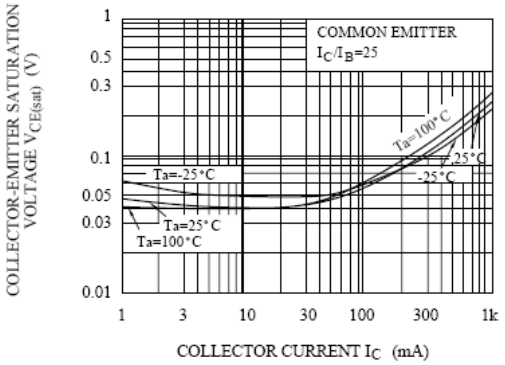
I_C - V_{CE}



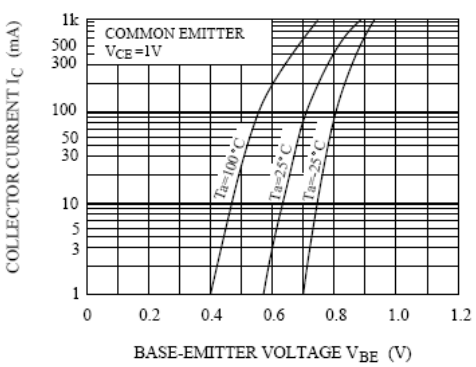
h_{FE} - I_C



$V_{CE(sat)}$ - I_C



I_C - V_{BE}



Pc – Ta