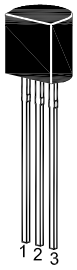
ST 2SC3330

NPN Silicon Epitaxial Planar Transistor
for switching and AF amplifier applications.

The transistor is subdivided into five groups, R, O, Y, G and L, 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}	60	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	200	mA
Power Dissipation	P_{tot}	300	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} = 6 V, I_C = 1 mA	Current Gain Group	R	h_{FE}	40	-	80	-
		O	h_{FE}	70	-	140	-
		Y	h_{FE}	120	-	240	-
		G	h_{FE}	200	-	400	-
		L	h_{FE}	350	-	700	-
Collector Base Cutoff Current at V_{CB} = 40 V			I_{CBO}	-	-	0.1	µA
Emitter Base Cutoff Current at V_{EB} = 3 V			I_{EBO}	-	-	0.1	µA
Collector Base Breakdown Voltage at I_C = 100 µA			$V_{(BR)CBO}$	60	-	-	V
Collector Emitter Breakdown Voltage at I_C = 10 mA			$V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage at I_E = 10 µA			$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at I_C = 100 mA, I_B =10 mA			$V_{CE(sat)}$	-	0.15	0.3	V
Gain Bandwidth Product at V_{CE} = 6 V, I_C = 10 mA			f_T	-	200	-	MHz
Output Capacitance at V_{CB} = 6 V, f = 1 MHz			C_{ob}	-	2.5	-	pF
Noise Figure at V_{CE} = 6 V, I_E = 0.5 mA, f = 1 KHz, R_S = 500 Ω			NF	-	4	-	dB