

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	60	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	200	mA
Power Dissipation	P_{tot}	300	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at V _{CE} = 6 V, I _C = 1 mA	Current Gain Group R O Y G L	h _{FE}	40	-	80	-
		h _{FE}	70	-	140	-
		h _{FE}	120	-	240	-
		h _{FE}	200	-	400	-
		h _{FE}	350	-	700	-
Collector Base Cutoff Current at V _{CB} = 40 V	I _{CBO}	-	-	100	nA	
Emitter Base Cutoff Current at V _{EB} = 3 V	I _{EBO}	-	-	100	nA	
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)}	-	-	0.3	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	

