

2SC3199

NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into four groups, 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}	50	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Emitter Current	I_E	-150	mA
Power Dissipation	P_{tot}	400	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.	Max.	Unit	
DC Current Gain at V _{CE} = 6 V, I _C = 2 mA	Current Gain Group				
	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} = 50 V	I _{CBO}	-	100	nA	
Emitter Base Cutoff Current at V _{EB} = 5 V	I _{EBO}	-	100	nA	
Collector Emitter Saturation Voltage at I _C = 100 mA, I _B = 10 mA	V _{CE(sat)}	-	0.25	V	
Transition Frequency at V _{CE} = 10 V, I _C = 1 mA	f _T	80	-	MHz	
Collector Output Capacitance at V _{CB} = 10 V, f = 1 MHz	C _{ob}	-	3.5	pF	



