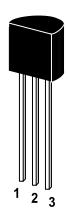
NPN Silicon Epitaxial Planar Transistor

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 Weight approx. 0.19g

Absolute Maximum Ratings (T_a = 25°C)

	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	125	°C
Storage Temperature Range	Ts	-55 to +125	°C







ST 2SC3199

Characteristics at T_{amb}=25 °C

	Symbol	Min.	Тур.	Max.	Unit
DC Current Gain					
at V _{CE} =6V, I _C =2mA					
Current Gain Group O	h _{FE}	70	-	140	-
Υ	h _{FE}	120	-	240	-
G	h _{FE}	200	-	400	-
L	h _{FE}	350	-	700	-
Collector Emitter Saturation Voltage					
at I _C =100mA, I _B =10mA	V _{CE(sat)}	-	0.1	0.25	V
Collector Cutoff Current					
at V _{CB} =50V	I _{CBO}	-	-	0.1	μΑ
Emitter Cutoff Current					
at V _{EB} =5V	I _{EBO}	-	-	0.1	μΑ
Transition Frequency					
at V _{CE} =10V, I _C =1mA	f _T	80	-	-	MHz
Collector Output Capacitance					
at V _{CB} =10V, f=1MHz	C _{OB}	-	2	3.5	pF
Noise Figure					
at V_{CE} =6V, I_{C} =0.1mA					
f=1KHz, R_G =10K Ω	NF	-	1	10	dB







