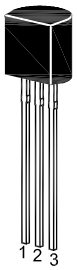
ST 2SC3195

NPN Silicon Epitaxial Planar Transistor

High frequency low noise amplifier application
VHF band amplifier application

The transistor is subdivided into three groups R, O and Y, 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}	40	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	4	V
Collector Current	I_C	20	mA
Emitter Current	I_E	-20	mA
Power Dissipation	P_{tot}	100	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}	100	-	200	-
Collector Base Cutoff Current at V_{CB} = 40 V			I_{CBO}	-	-	0.5	µA
Emitter Base Cutoff Current at V_{EB} = 4 V			I_{EBO}	-	-	0.5	µA
Transition Frequency at V_{CE} = 6 V, I_C = 1 mA			f_T	-	550	-	MHz
Reverse Transfer Capacitance at V_{CE} = 6 V, f = 1 MHz			C_{re}	-	0.7	-	pF
Collector Base Time Constant at V_{CE} = 6 V, I_E = -1 mA, f = 30 MHz			$C_c \cdot rbb'$	-	-	20	ps
Noise Figure at V_{CC} = 6 V, f = 100 MHz, I_E = -1 mA			NF	-	2.5	5	dB
Power Gain at V_{CC} = 6 V, f = 100 MHz, I_E = -1 mA			G_{pe}	-	18	-	dB