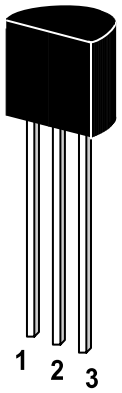
ST 2SC3190

NPN Silicon Epitaxial Planar Transistor
High frequency low noise amplifier application
HF 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
Weight approx. 0.19g

Absolute Maximum Ratings (T_a = 25°C)

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	35	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	4	V
Collector Current	I_C	100	mA
Emitter Current	I_E	-100	mA
Power Dissipation	P_{tot}	400	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_S	-55 to +125	°C

SEMTECH ELECTRONICS LTD.
(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)

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Characteristics at T_{amb}=25 °C

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at V_{CE}=12V, I_C=2mA					
Current Gain Group R	h_{FE}	40	-	80	-
O	h_{FE}	70	-	140	-
Y	h_{FE}	120	-	240	-
Collector Cutoff Current					
at V_{CB}=20V	I_{CBO}	-	-	0.1	μA
Emitter Cutoff Current					
at V_{EB}=2V	I_{EBO}	-	-	1	μA
Collector Saturation Voltage					
at I_C=10mA, I_B=1mA	$V_{CE(sat)}$	-	-	0.4	V
Base Emitter Saturation Voltage					
at I_C=10mA, I_B=1mA	$V_{BE(sat)}$	-	-	1	V
Transition Frequency					
at V_{CE}=10V, I_C=2mA	f_T	80	120	-	MHz
Reverse Transfer Capacitance					
at V_{CE}=10V, f=1MHz	Cre	-	2.2	3	pF
Collector Base Time Constant					
at V_{CE}=10V, I_E=-1mA, f=30MHz	C_c,rbb	-	30	50	ps
Noise Figure					
at V_{CE}=10V, f=1MHz, I_E=-1mA, R_g=50ς	NF	-	2	3.5	dB