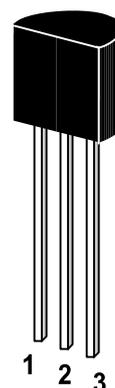


# ST 2SC3190

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.



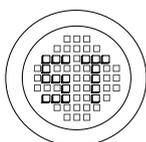
1. Emitter 2. Collector 3. Base

TO-92 Plastic Package  
Weight approx. 0.19g

## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Collector Base Voltage	$V_{\text{CBO}}$	35	V
Collector Emitter Voltage	$V_{\text{CEO}}$	30	V
Emitter Base Voltage	$V_{\text{EBO}}$	4	V
Collector Current	$I_{\text{C}}$	100	mA
Emitter Current	$I_{\text{E}}$	-100	mA
Power Dissipation	$P_{\text{tot}}$	400	mW
Junction Temperature	$T_{\text{j}}$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{\text{S}}$	-55 to +125	$^\circ\text{C}$

G S P FORM A IS AVAILABLE



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РАДИОТЕХ

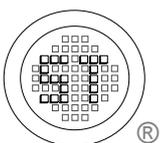
Тел.: (495) 795-0805  
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Веб: www.rct.ru

# ST 2SC3190

## Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

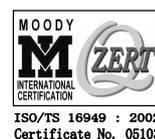
	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE}=12\text{V}$ , $I_C=2\text{mA}$	Current Gain Group R	$h_{FE}$	40	-	80	-
	O	$h_{FE}$	70	-	140	-
	Y	$h_{FE}$	120	-	240	-
Collector Cutoff Current at $V_{CB}=20\text{V}$	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	
Emitter Cutoff Current at $V_{EB}=2\text{V}$	$I_{EBO}$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

**G S P FORM A IS AVAILABLE**



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116



ISO 9001 : 2000  
Certificate No. 000-199-01-002-001

Dated : 07/12/2002