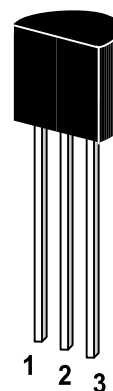


ST 2SC535

NPN Silicon Epitaxial Planar Transistor
VHF amplifier, mixer, local oscillator.

The transistor is subdivided into two groups B and C according to its DC current gain

On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Collector 3. Base

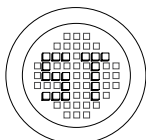
TO-92 Plastic Package

Weight approx. 0.19g

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

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	30	V
Collector Emitter Voltage	V_{CEO}	20	V
Emitter Base Voltage	V_{EBO}	4	V
Collector Current	I_{C}	20	mA
Power Dissipation	P_{tot}	100	mW
Junction Temperature	T_{j}	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{s}	-55 to +150	$^{\circ}\text{C}$

G S P FORM A IS AVAILABLE



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РАДИОТЕХ

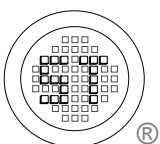
Тел.: (495) 795-0805
Факс: (495) 234-1603
Эл. почта: info@rct.ru
Веб: www.rct.ru

ST 2SC535

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

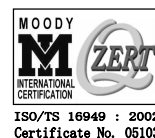
	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE}=6\text{V}$, $I_C=1\text{mA}$						
	Current Gain Group B	h_{FE}	60	-	120	-
	C	h_{FE}	100	-	200	-
Collector Base Breakdown Voltage at $I_C=10\mu\text{A}$	$V_{(BR)CBO}$	30	-	-	V	
Collector Emitter Breakdown Voltage at $I_C=1\text{mA}$	$V_{(BR)CEO}$	20	-	-	V	
Emitter Base Breakdown Voltage at $I_E=10\mu\text{A}$	$V_{(BR)EBO}$	4	-	-	V	
Collector Cutoff Current at $V_{CB}=10\text{V}$	I_{CBO}	-	-	0.5	μA	
Collector Saturation Voltage at $I_C=20\text{mA}$, $I_B=4\text{mA}$	$V_{CE(sat)}$	-	0.17	-	V	
Base Emitter Voltage at $V_{CE}=6\text{V}$, $I_C=1\text{mA}$	V_{BE}	-	0.72	-	V	
Gain Bandwidth Product at $V_{CE}=6\text{V}$, $I_C=5\text{mA}$	f_T	450	940	-	MHz	
Output Capacitance at $V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{OB}	-	0.9	1.2	pF	
Noise Figure at $V_{CE}=6\text{V}$, $f=100\text{MHz}$, $I_C=1\text{mA}$, $R_g=50\Omega$	NF	-	3.5	5.5	dB	
Power Gain at $V_{CE}=6\text{V}$, $f=100\text{MHz}$, $I_C=1\text{mA}$	PG	17	20	-	dB	
Input admittance(typ) at $V_{CE}=6\text{V}$, $f=100\text{MHz}$, $I_C=1\text{mA}$	y_{ie}	$1.3+j5.3$	-	-	mS	
Reverse transfer admittance(typ) at $V_{CE}=6\text{V}$, $f=100\text{MHz}$, $I_C=1\text{mA}$	y_{re}	$-0.078-j0.41$	-	-	mS	
Foward transfer admittance(typ) at $V_{CE}=6\text{V}$, $f=100\text{MHz}$, $I_C=1\text{mA}$	y_{fe}	$32-j10$	-	-	mS	
Output admittance(typ) at $V_{CE}=6\text{V}$, $f=100\text{MHz}$, $I_C=1\text{mA}$	y_{oe}	$0.08+j0.82$	-	-	mS	

G S P FORM A IS AVAILABLE



SEMTECH ELECTRONICS LTD.

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



ISO/TS 16949 : 2002
Certificate No. 05103



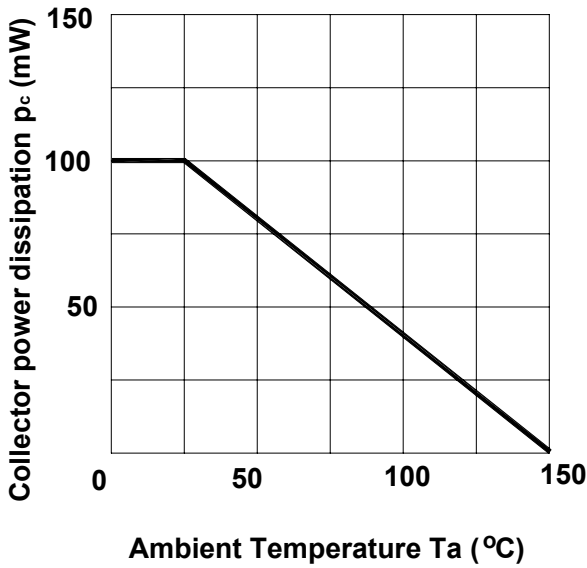
ISO 14001
Certificate No. 7116



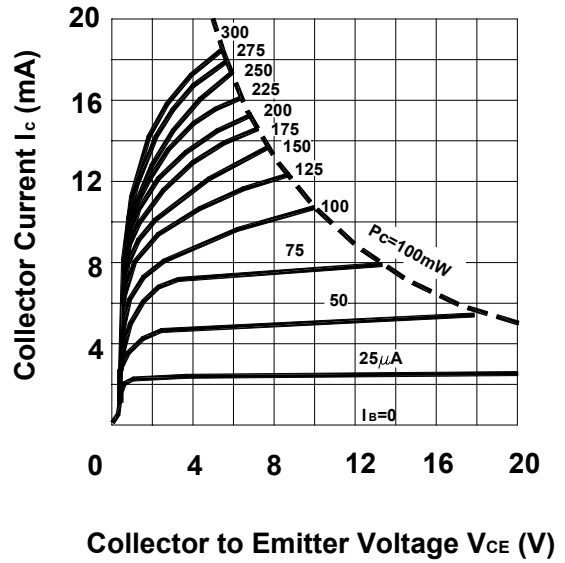
ISO 9001 : 2000
Certificate No. 000-199-01-002-001

Dated : 07/12/2002

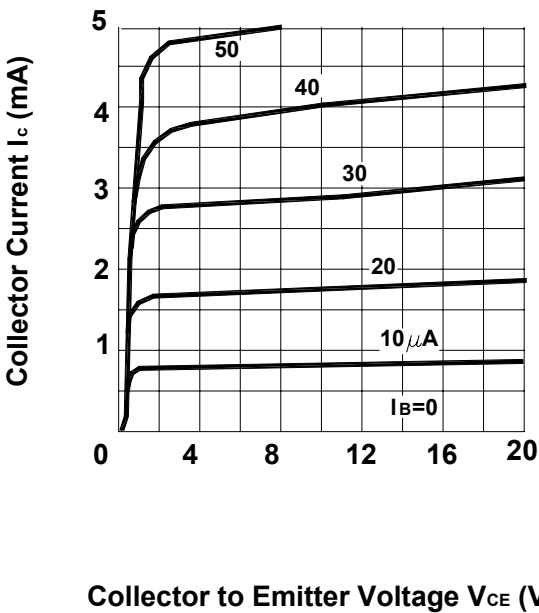
Maximum Collector Dissipation Curve



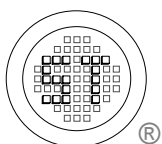
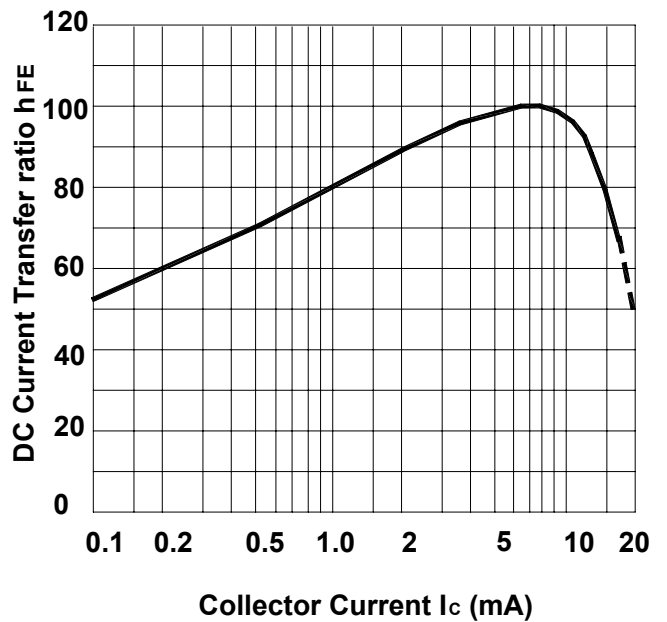
Typical Output Characteristics



Typical Output Characteristics



DC Current Transfer Ratio vs. Collector Current



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