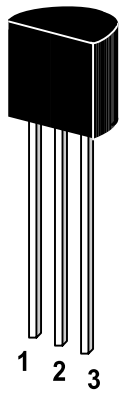
ST 2SC2310

NPN Silicon Epitaxial Planar Transistor
low frequency ,low noise amplifier .

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 (Ta=25 ^{O}C)

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	55	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Emitter Current	$-I_E$	100	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	^{O}C
Storage Temperature Range	T_S	-55 to +150	^{O}C

G S P FORM A IS AVAILABLE

®

РАДИОТЕХ

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

ST 2SC2310

Characteristics at T_{amb}=25 ^{o}C

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V_{CE}=12V, I_C=2mA					
Current Gain Group B	h_{FE}	100	-	200	-
C	h_{FE}	160	-	320	-
Collector Cutoff Current at V_{CB}=18V	I_{CBO}	-	-	0.5	μA
Emitter Cutoff Current at V_{EB}=2V	I_{EBO}	-	-	0.5	μA
Collector Emitter Saturation Voltage at I_C=10mA, I_B=1mA	$V_{CE(sat)}$	-	-	0.2	V
Transition Frequency at V_{CE}=12V, I_C=2mA	f_T	-	230	-	MHz
Base Emitter Voltage at I_C=2mA, V_{CE}=12V	V_{BE}	-	0.67	0.75	V
Collector Output Capacitance at V_{CB}=10V, f=1MHz	C_{ob}	-	1.8	3.5	pF
Collector Base Breakdown Voltage at I_C=10μA	V_{CBO}	55	-	-	V
Collector Emitter Breakdown Voltage at I_C=1mA	V_{CEO}	50	-	-	V
Emitter Base Breakdown Voltage at I_C=10μA	V_{EBO}	5	-	-	V
Noise Figure at V_{CE}=6V, I_C=0.1mA, f=120Hz, R_g=500Ω	NF	-	3	5	dB
Small Signal Input Impedance at V_{CE}=5V, I_C=0.1mA,f=270Hz	h_{ie}	-	16.5	-	kΩ
Small Signal Feedback Ratio at V_{CE}=5V, I_C=0.1mA,f=270Hz	h_{re}	-	70	-	$X10^{-6}$
Small Signal Current Transfer Ratio at V_{CE}=5V, I_C=0.1mA,f=270Hz	h_{fe}	-	130	-	-
Small Signal Output Admittance at V_{CE}=5V, I_C=0.1mA,f=270Hz	h_{oe}	-	11	-	μS

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)

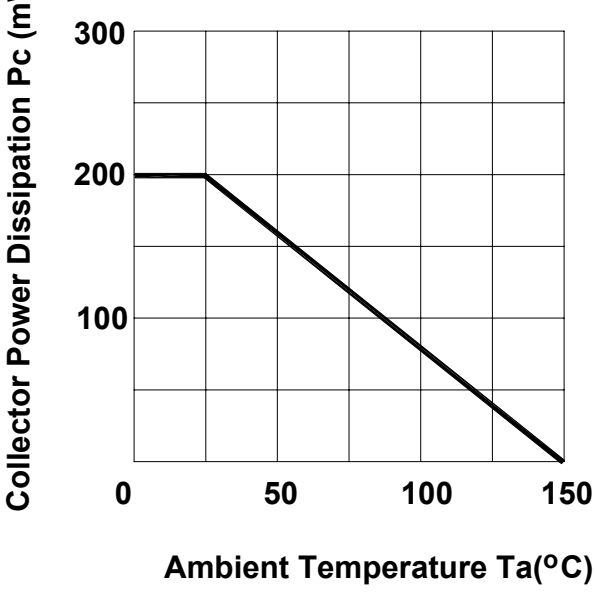
ISO/TS 16949 : 2002 Certificate No. 05103

ISO 14001 Certificate No. 7116

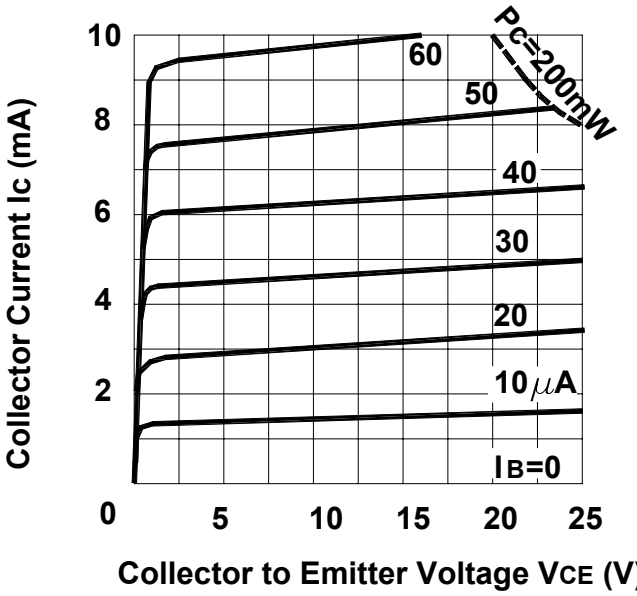
ISO 9001 : 2000

Dated : 07/12/2002

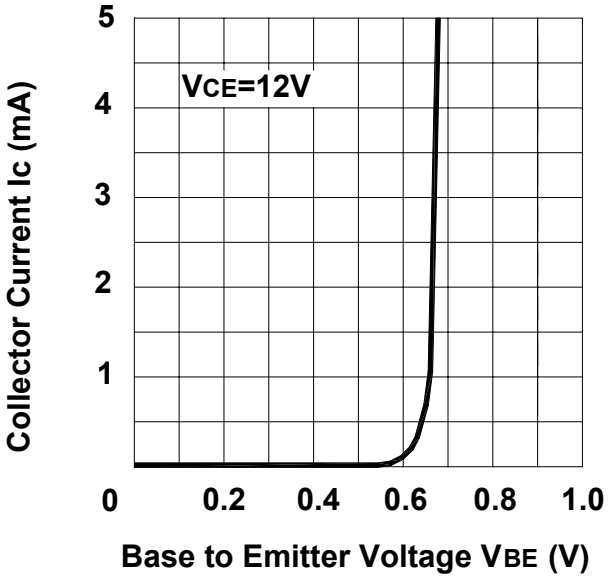
Maximum Collector Dissipation Curve



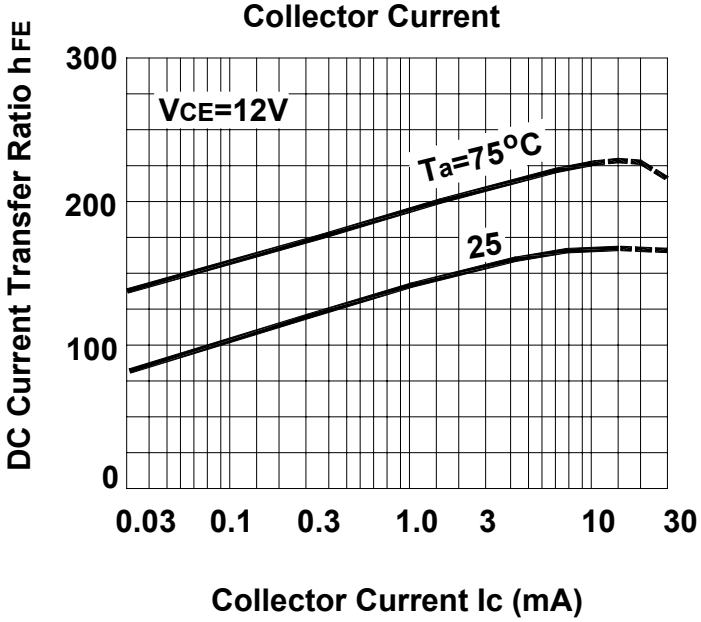
Typical Output Characteristics



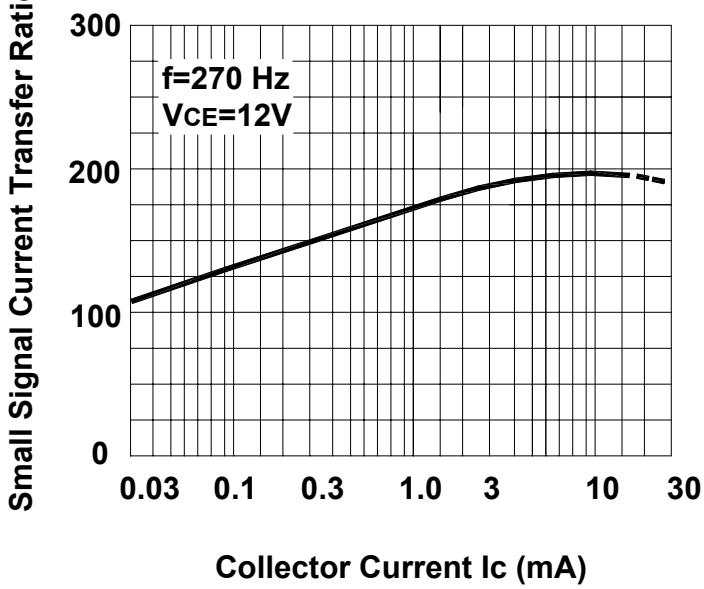
Typical Transfer Characteristics



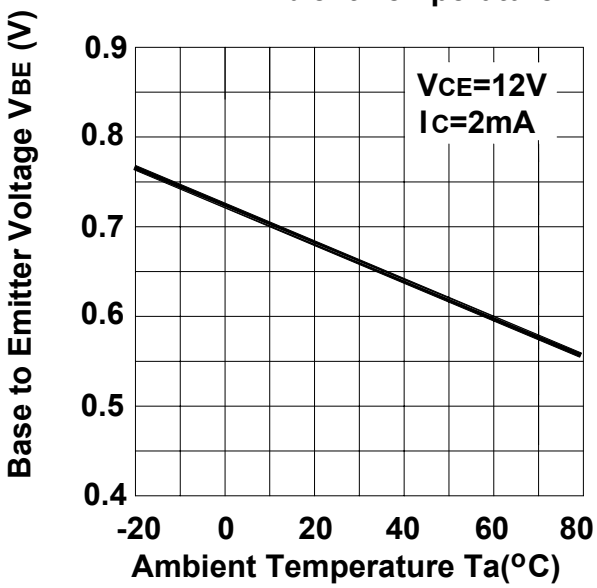
DC Current Transfer Ratio vs. Collector Current



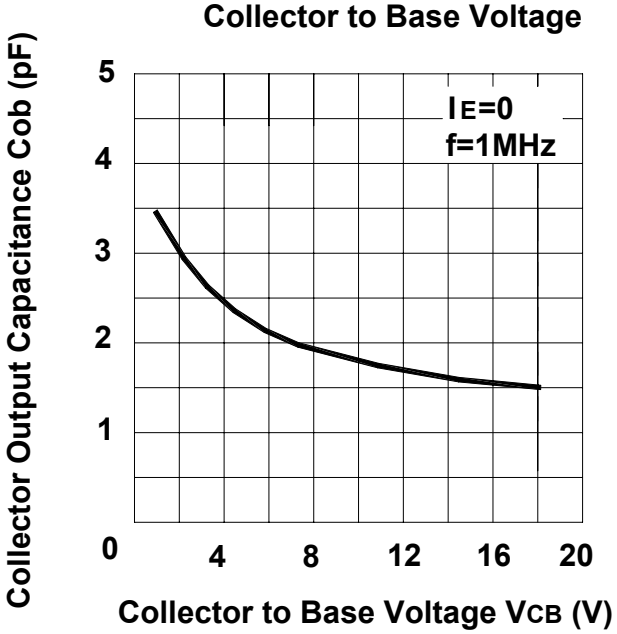
Small Signal Current Transfer Ratio vs. Collector Current



Base to Emitter Voltage vs. Ambient Temperature



Collector Output Capacitance vs. Collector to Base Voltage



Emitter Input Capacitance vs. Emitter to Base Voltage

