

RT5N14BC

Transistor With Resistor
For Switching Application
Silicon NPN Epitaxial Type

DESCRIPTION

RT5N14BC is a one chip transistor with built-in bias resistor, PNP type is RT5P14BC.

FEATURE

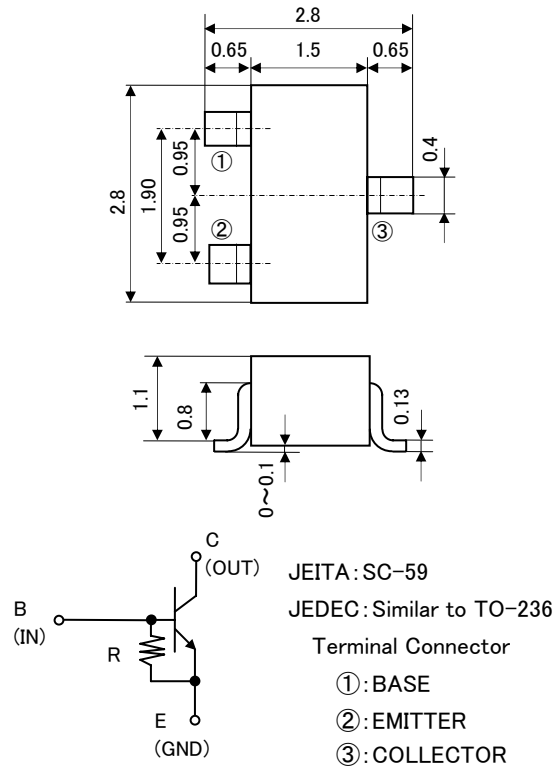
Built-in bias resistor (R=10kΩ)
High collector current (Ic=0.5A)
Mini package for easy mounting

APPLICATION

Inverted circuit, Switching circuit, Interface circuit,
Driver circuit

OUTLINE DRAWING

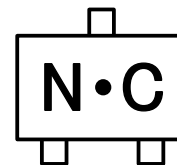
Unit: mm



MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT
V _{CBO}	Collector to Base voltage	50	V
V _{EBO}	Emitter to Base voltage	5	V
V _{CEO}	Collector to Emitter voltage	50	V
I _C	Collector current	500	mA
P _C	Collector dissipation(Ta=25°C)	200	mW
T _j	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55~+150	°C

MARKING



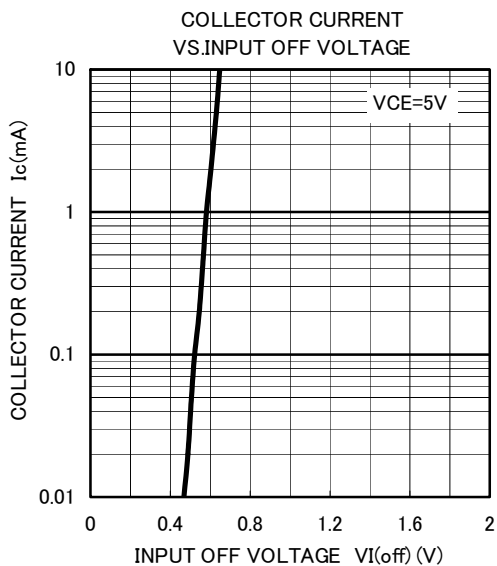
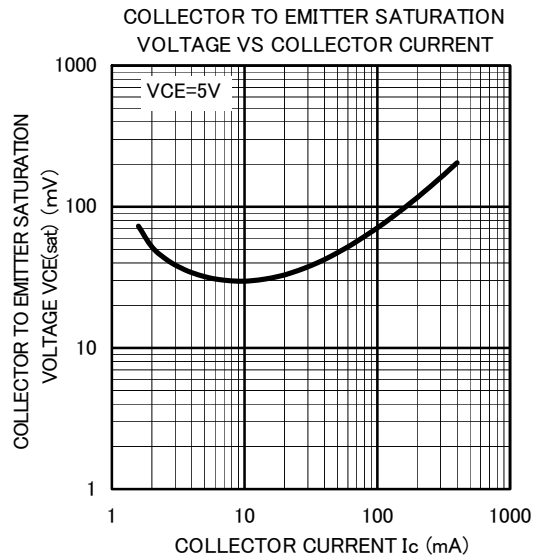
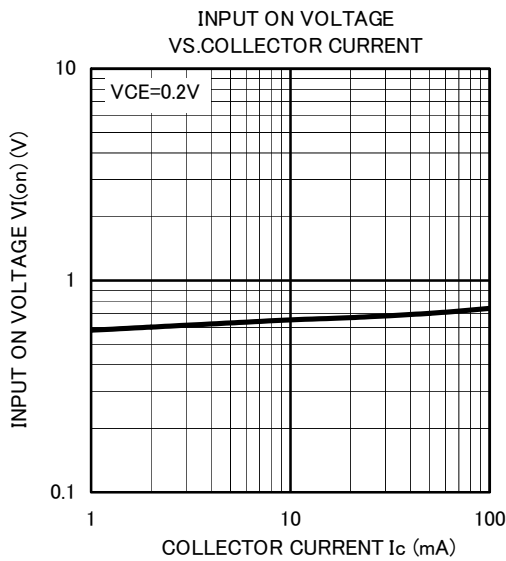
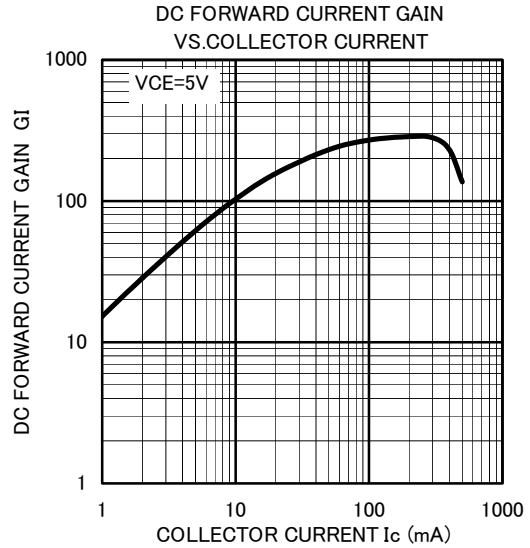
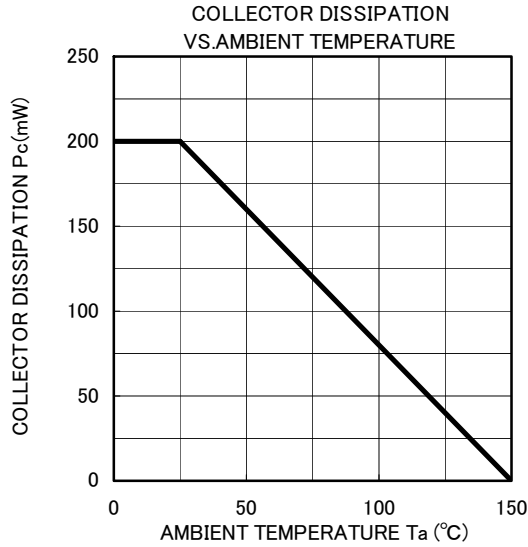
ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
V _{CBO}	C to E break down voltage	I _C =1mA	50	—	—	V
I _{CBO}	Collector cut off current	V _{CB} =50V	—	—	0.5	μA
I _{EBO}	Emitter cut off current	V _{EB} =5V	0.385	—	0.714	mA
V _{CE(sat)}	C to E saturation voltage	I _C =50mA, I _B =2.5mA	—	—	0.3	V
G _I	DC forward current gain	V _{CE} =5V, I _E =100mA	56	—	—	—
R	Emitter-base resistor	—	7	10	13	kΩ
f _T	Gain band width product	V _{CE} =10V, I _E =5mA, f=100MHz	—	150	—	MHz

RT5N14BC

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For Switching Application
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TYPICAL CHARACTERISTICS (Ta=25°C)





Keep safety first in your circuit designs!

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