RT5P14BC

Transistor With Resistor
For Switching Application
Silicon PNP Epitaxial Type

DESCRIPTION

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

FEATURE

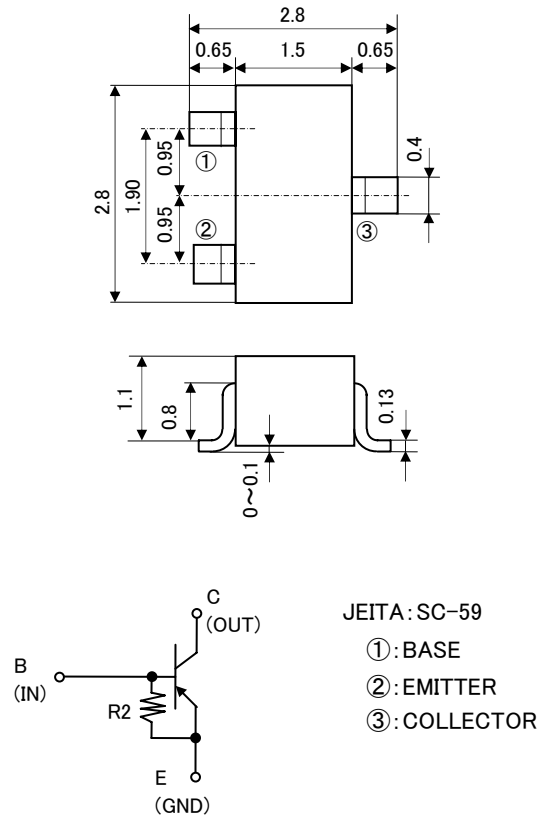
Built-in bias resistor （R=10kΩ）
High collector current （Ic=-0.5A）
Mini package for easy mounting

APPLICATION

Inverted circuit, Switching circuit, Interface circuit, Driver circuit

OUTLINE DRAWING

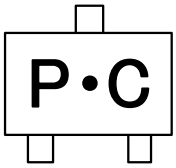
Unit: mm



MAXIMUM RATING (Ta=25℃)

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℃)	200	mW
T_j	Junction temperature	150	℃
T_{stg}	Storage temperature	-55～＋150	℃

MARKING

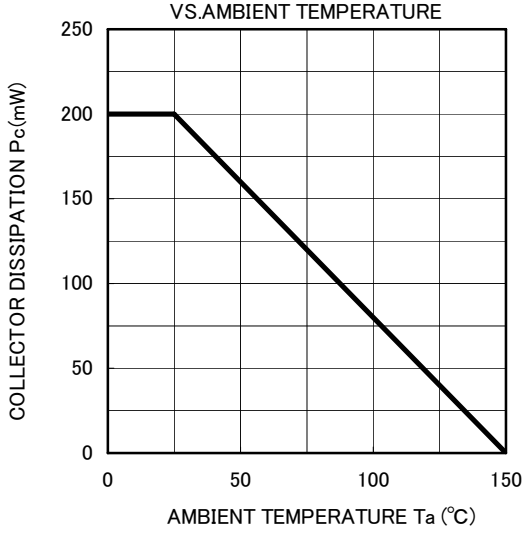


ELECTRICAL CHARACTERISTICS (Ta=25℃)

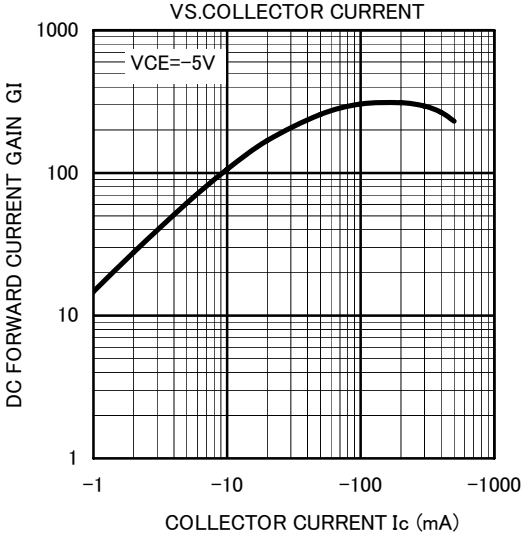
SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
V_{CEO}	C to E breakdown voltage	I_C=-1mA	-50	—	—	V
I_{CBO}	Collector cut off current	V_{CB}=-50V	—	—	-0.5	μA
I_{EBO}	Emitter cut off current	V_{EB}=-5V	-0.385	—	-0.714	mA
$V_{CE(sat)}$	C to E saturation voltage	I_C=-50mA, I_B=-2.5mA	—	—	-0.3	V
G_I	DC forward current gain	V_{CE}=-5V, I_C=-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

TYPICAL CHARACTERISTICS

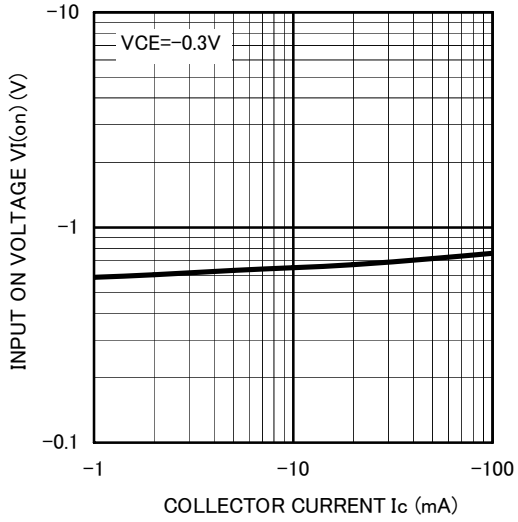
COLLECTOR DISSIPATION
VS.AMBIENT TEMPERATURE



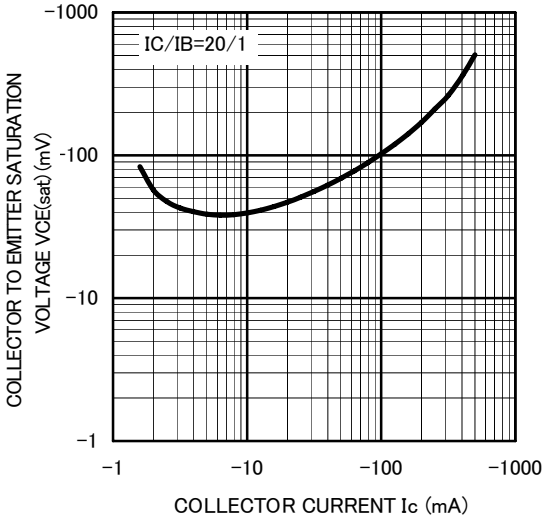
DC FORWARD CURRENT GAIN
VS.COLLECTOR CURRENT



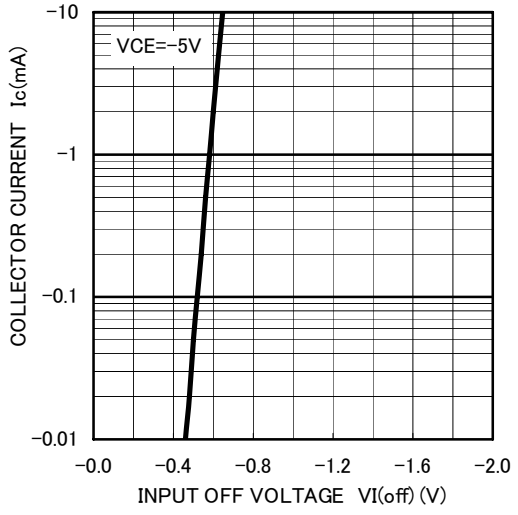
INPUT ON VOLTAGE
VS.COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION
VOLTAGE VS COLLECTOR CURRENT



COLLECTOR CURRENT
VS.INPUT OFF VOLTAGE



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