

RT1N14BX SERIES

<Transistor>

Transistor With Resistor
For Switching Application
Silicon NPN Epitaxial Type

DESCRIPTION

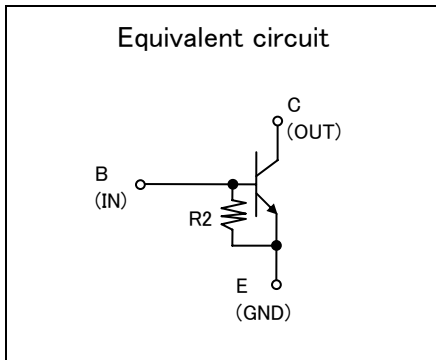
RT1N14BX is a one chip transistor with built-in bias resistor, PNP type is RT1P14BX.

FEATURE

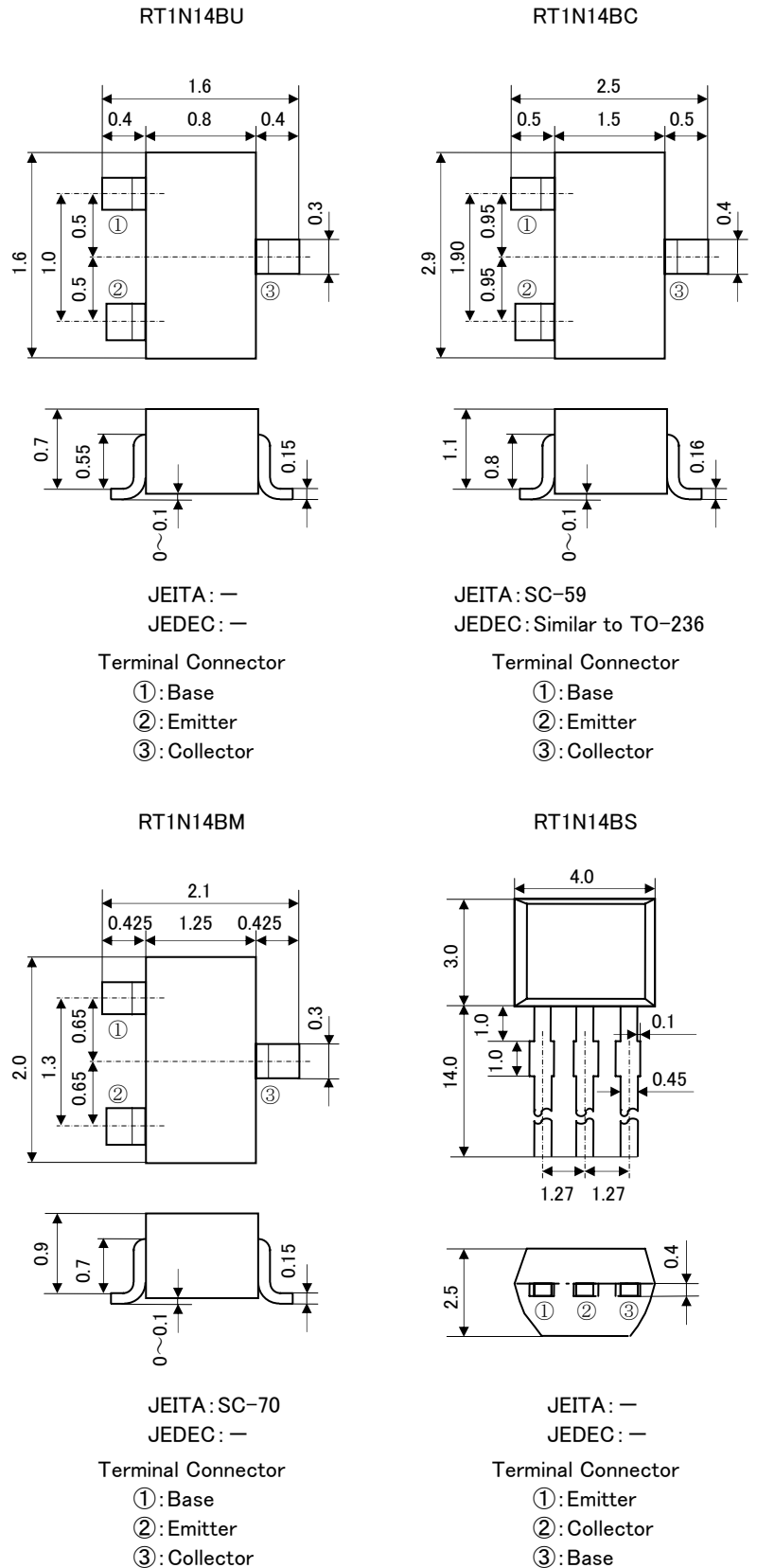
- Built-in bias resistor ($R_2=10k\Omega$).

APPLICATION

Inverted circuit, switching circuit, interface circuit, driver circuit.



OUTLINE DRAWING UNIT : mm



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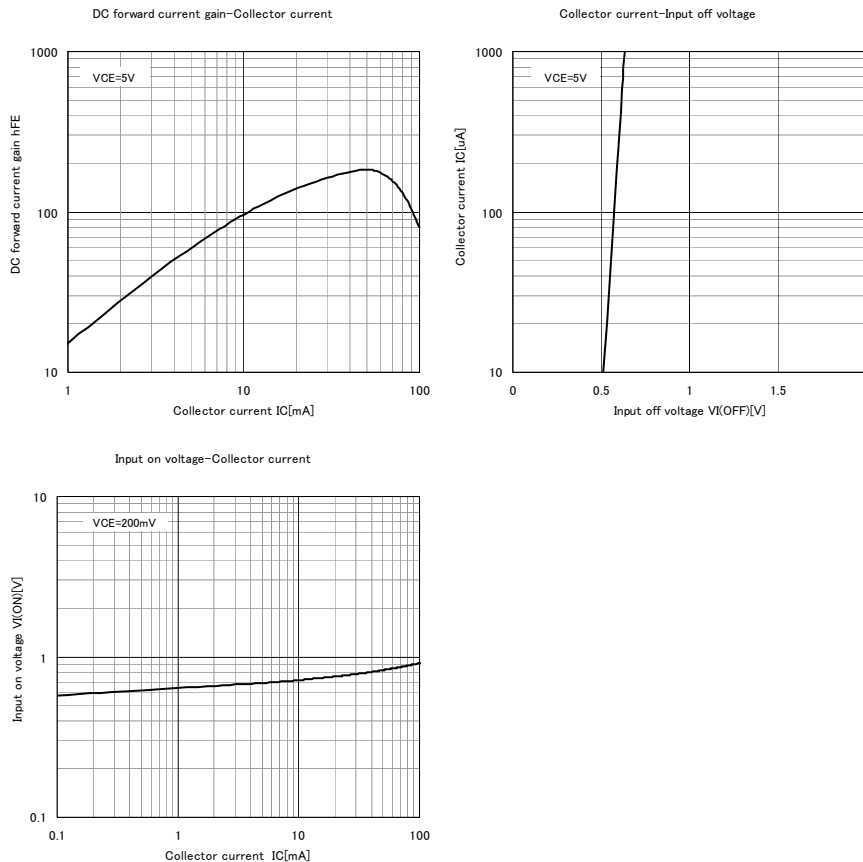
MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING				UNIT
		RT1N14BU	RT1N14BM	RT1N14BC	RT1N14BS	
V_{CBO}	Collector to Base voltage	50				V
V_{EBO}	Emitter to Base voltage	6				V
V_{CEO}	Collector to Emitter voltage	50				V
I_C	Collector current	100				mA
I_{CM}	Peak Collector current	200				mA
P_C	Collector dissipation(Ta=25°C)	150	200		450	mW
T_j	Junction temperature	+150	+150			°C
T_{stg}	Storage temperature	-55~+150		-55~+150		°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
$V_{(BR)CEO}$	C to E break down voltage	$I_C=100\mu A, R_{BE}=\infty$	50			V
I_{CBO}	Collector cut off current	$V_{CB}=50V, I_E=0$			0.1	μA
h_{FE}	DC forward current gain	$V_{CE}=5V, I_C=5mA$	30			—
$V_{CE(sat)}$	C to E saturation voltage	$I_C=10mA, I_B=0.5mA$			0.3	V
R_2	Emitter-base resistance		7	10	13	$k\Omega$
f_T	Gain band width product	$V_{CE}=6V, I_E=-10mA$		200		MHz

TYPICAL CHARACTERISTICS





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