

RT1P14BX SERIES

<Transistor>

Transistor With Resistor
For Switching Application
Silicon PNP Epitaxial Type

DESCRIPTION

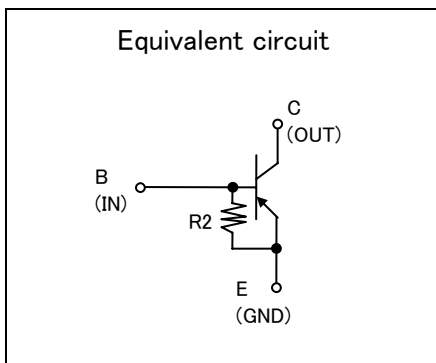
RT1P14BX is a one chip transistor with built-in bias resistor, NPN type is RT1N14BX.

FEATURE

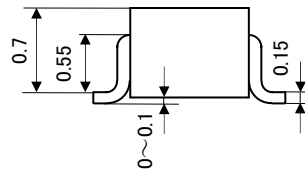
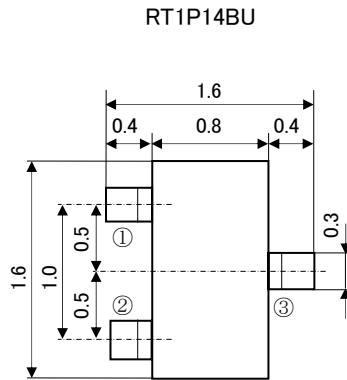
- Built-in bias resistor ($R_2=10k\Omega$).

APPLICATION

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



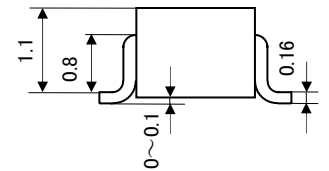
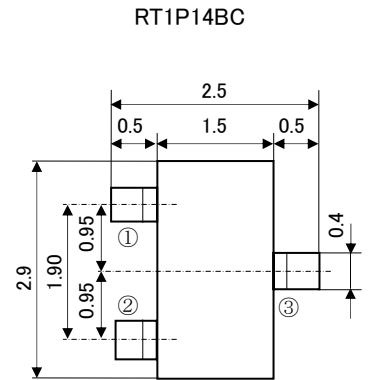
OUTLINE DRAWING UNIT : mm



JEITA: —
JEDEC: —

Terminal Connector

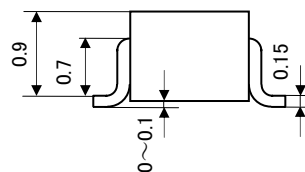
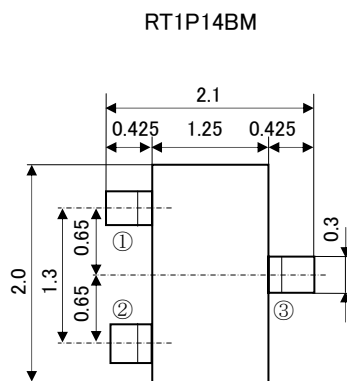
- ①: Base
- ②: Emitter
- ③: Collector



JEITA: SC-59
JEDEC: Similar to TO-236

Terminal Connector

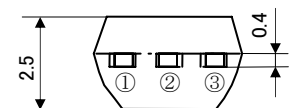
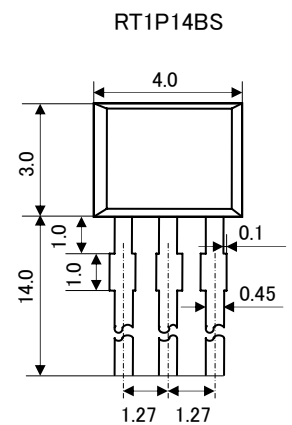
- ①: Base
- ②: Emitter
- ③: Collector



JEITA: SC-70
JEDEC: —

Terminal Connector

- ①: Base
- ②: Emitter
- ③: Collector



JEITA: —
JEDEC: —

Terminal Connector

- ①: Emitter
- ②: Collector
- ③: Base

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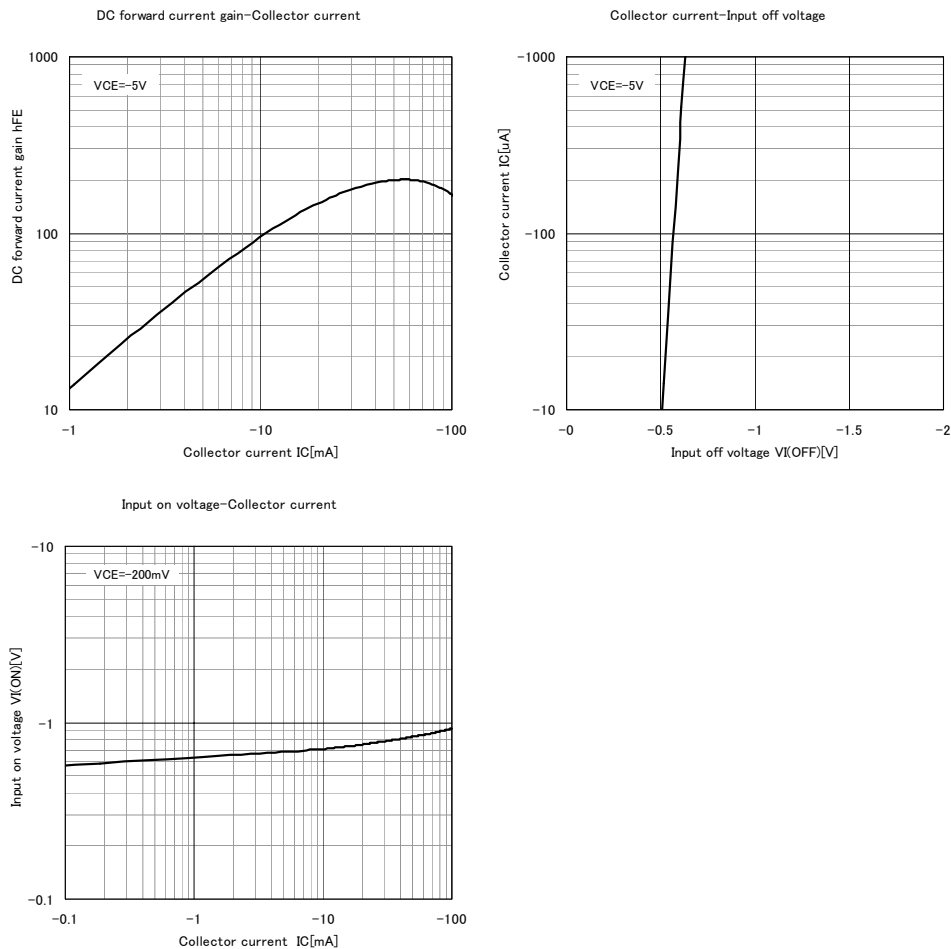
MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING				UNIT
		RT1P14BU	RT1P14BM	RT1P14BC	RT1P14BS	
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	$V_{CE} = -6V, I_E = 10mA$		150		MHz

TYPICAL CHARACTERISTICS





Marketing division, Marketing planning department

6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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