

RT1N15BX SERIES

<Transistor>

Transistor With Resistor
For Switching Application
Silicon NPN Epitaxial Type

DESCRIPTION

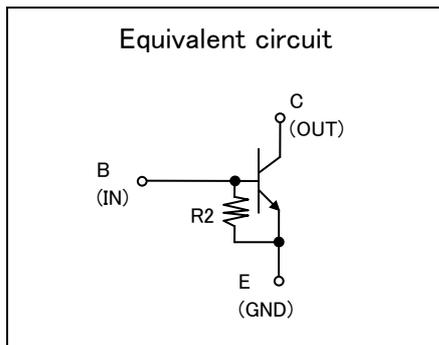
RT1N15BX is one chip transistor
With built-in bias resistor, PNP type is RT1P15BX.

FEATURE

- Built-in bias resistor (R2=100kΩ).

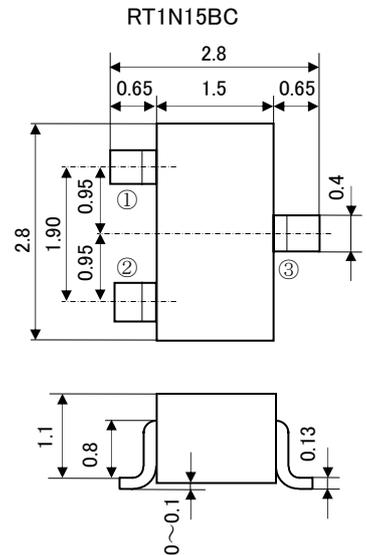
APPLICATION

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



OUTLINE DRAWING

UNIT : mm



JEITA: SC-59

JEDEC: Similar to TO-236

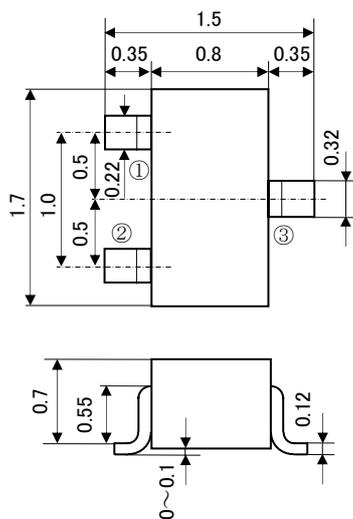
Terminal Connector

①: Base

②: Emitter

③: Collector

RT1N15BU



JEITA: SC-75A

JEDEC: —

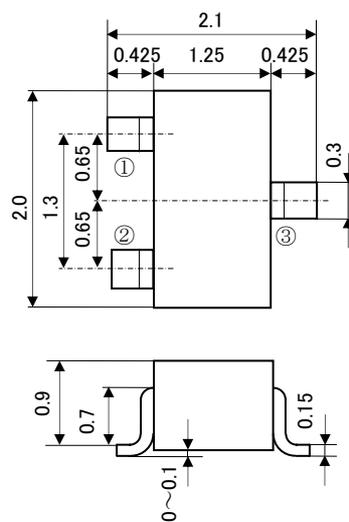
Terminal Connector

①: Base

②: Emitter

③: Collector

RT1N15BM



JEITA: SC-70

JEDEC: —

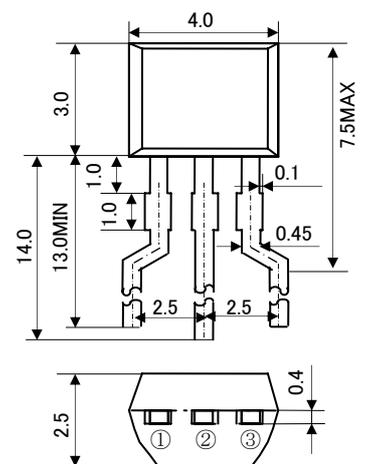
Terminal Connector

①: Base

②: Emitter

③: Collector

RT1N15BS



JEITA: —

JEDEC: —

Terminal Connector

①: Emitter

②: Collector

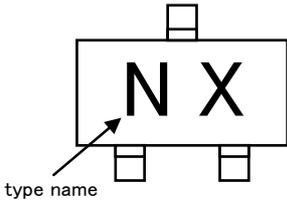
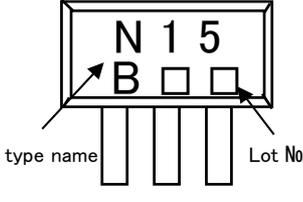
③: Base

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MARKING

RT1N15BC RT1N15BM RT1N15BU	RT1N15BS
	

MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING				UNIT
		RT1N15BU	RT1N15BM	RT1N15BC	RT1N15BS	
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				°C
T_{stg}	Storage temperature	-55~+150				°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

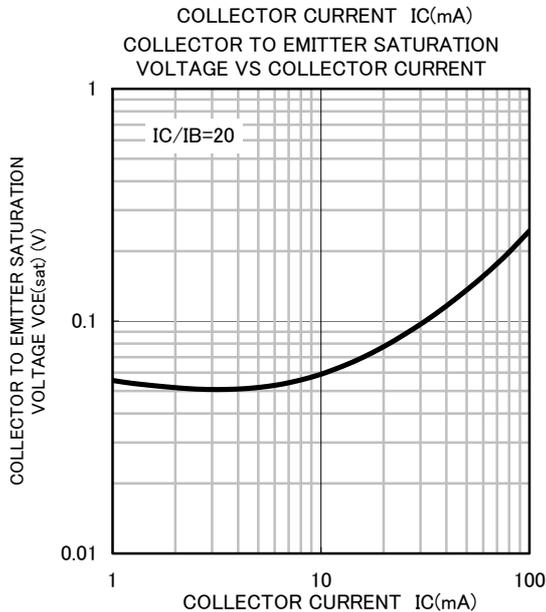
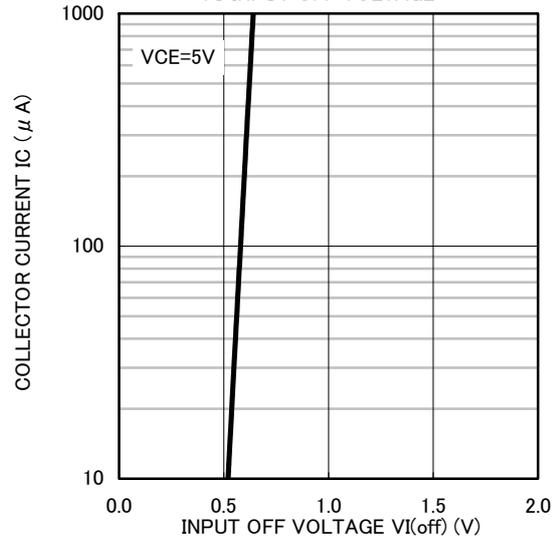
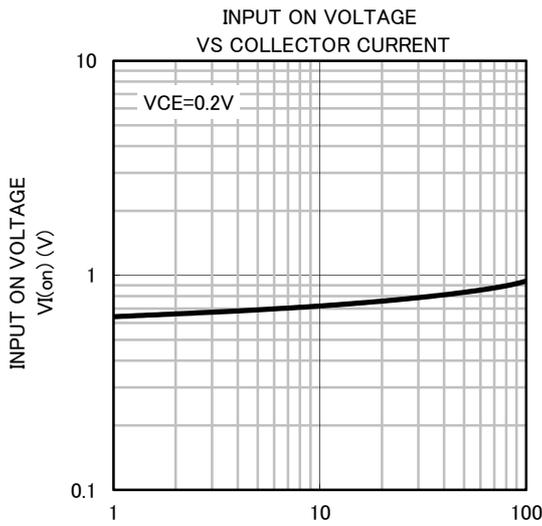
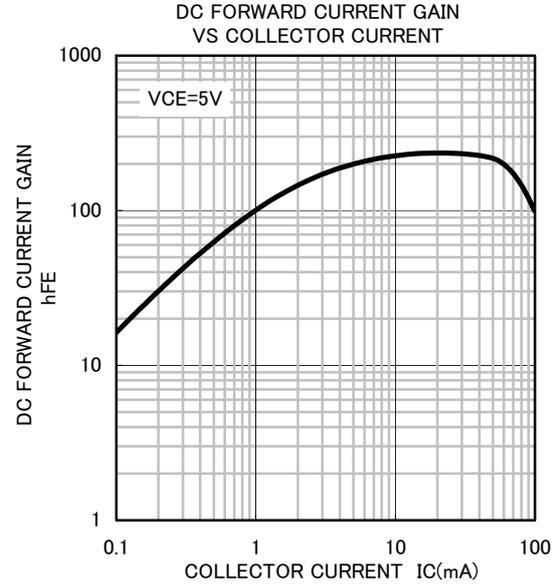
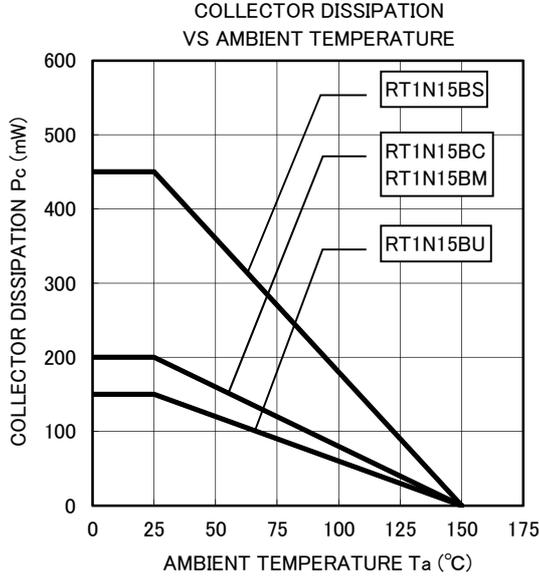
SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
$V_{(BR)CEO}$	C to E break down voltage	$I_C=100\mu A, R_{BE}=\infty$	50	—	—	V
I_{CBO}	Collector cut off current	$V_{CB}=50V, I_E=0$	—	—	0.1	μA
I_{EBO}	Emitter cut off current	$V_{EB}=5V, I_C=0$	38	50	73	μA
h_{FE}	DC forward current gain	$V_{CE}=5V, I_C=5mA$	82	—	—	—
$V_{CE(sat)}$	C to E saturation voltage	$I_C=10mA, I_B=0.5mA$	—	—	0.3	V
R_2	Emitter-base resistor	—	70	100	130	$k\Omega$
f_T	Gain band width product	$V_{CE}=6V, I_E=-10mA$	—	200	—	MHz

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TYPICAL CHARACTERISTICS (Ta=25°C)





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