RT1P150X SERIES

〈Transistor〉

Transistor With Resistor

For Switching Application

Silicon PNP Epitaxial Type

DESCRIPTION

RT1P150X is a one chip transistor with built-in bias resistor,NPN type is RT1N150X.

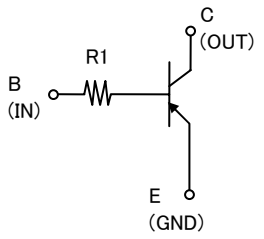
FEATURE

・Built-in bias resistor (R1=100kΩ).

APPLICATION

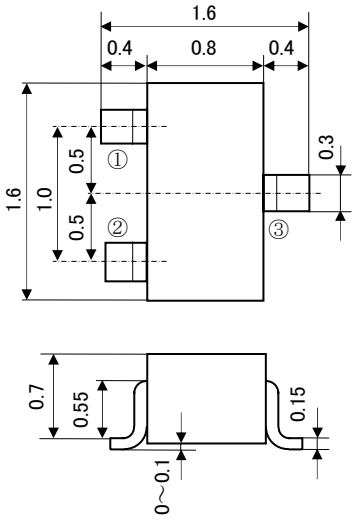
Inverted circuit,switching circuit,interface circuit, driver circuit.

Equivalent circuit



OUTLINE DRAWING UNIT : mm

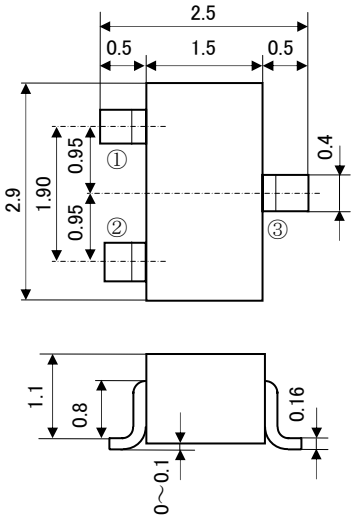
RT1P150U



JEITA : —
JEDEC : —

Terminal Connector
①:Base
②:Emitter
③:Collector

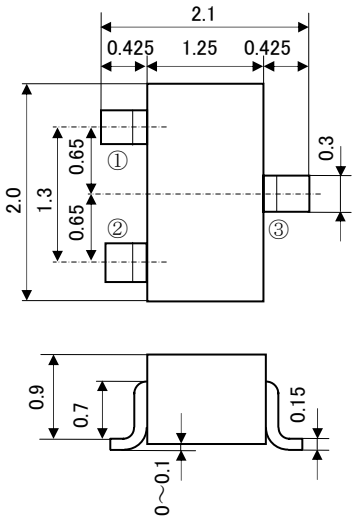
RT1P150C



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

Terminal Connector
①:Base
②:Emitter
③:Collector

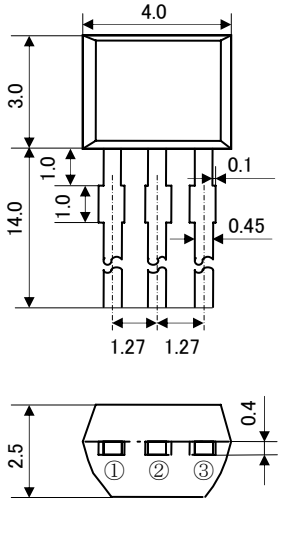
RT1P150M



JEITA : SC-70
JEDEC : —

Terminal Connector
①:Base
②:Emitter
③:Collector

RT1P150S



JEITA : —
JEDEC : —

Terminal Connector
①:Emitter
②:Collector
③:Base

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〈Transistor〉

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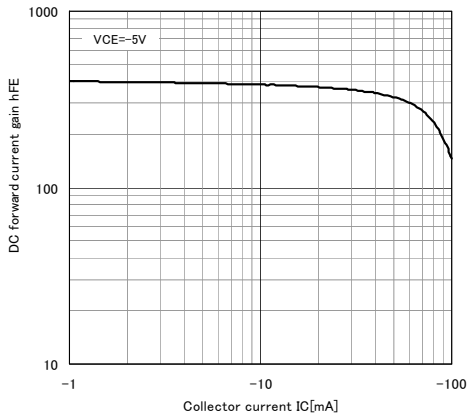
MAXIMUM RATING (Ta=25℃)

SYMBOL	PARAMETER	RATING				UNIT
		RT1P150U	RT1P150M	RT1P150C	RT1P150S	
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℃)	**150**	**200**		**450**	mW
Tj	Junction temperature	+150	+150			℃
Tstg	Storage temperature	−55～+150	−55～+150			℃

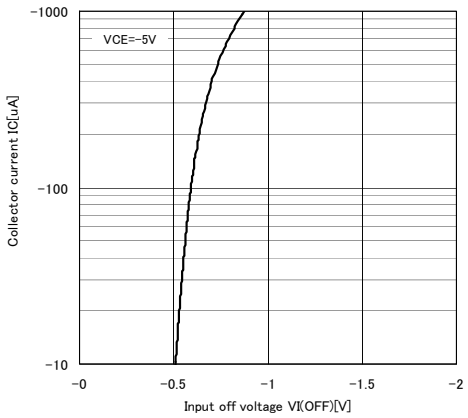
ELECTRICAL CHARACTERISTICS (Ta=25℃)

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
$V_{(BR)CEO}$	C to E break down voltage	I_C=−100μA, R_{BE}=∞	−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=−1mA	100			—
$V_{CE(sat)}$	C to E saturation voltage	I_C=−1mA, I_B=−0.1mA			−0.3	V
R_1	Input resistance			100		kΩ
f_T	Gain band width product	V_{CE}=−6V, I_E=10mA		150		MHz

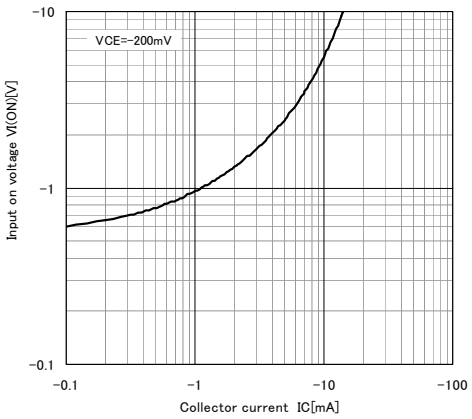
DC forward current gain−Collector current



Collector current−Input off voltage



Input on voltage−Collector current



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