

# RT1P432X SERIES

〈Transistor〉

Transistor With Resistor

For Switching Application

Silicon PNP Epitaxial Type

## DESCRIPTION

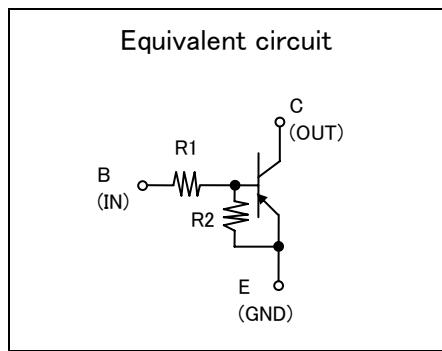
RT1P432X is a one chip transistor with built-in bias resistor, NPN type is RT1N432X.

## FEATURE

• Built-in bias resistor ( $R1=4.7k\Omega$ ,  $R2=10k\Omega$ ).

## APPLICATION

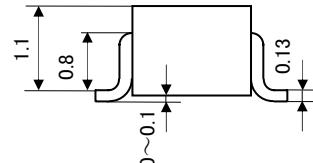
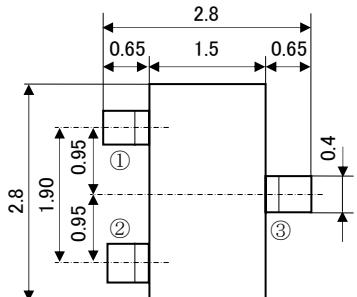
. Inverted circuit, switching circuit, interface circuit, driver circuit.



## OUTLINE DRAWING

UNIT : mm

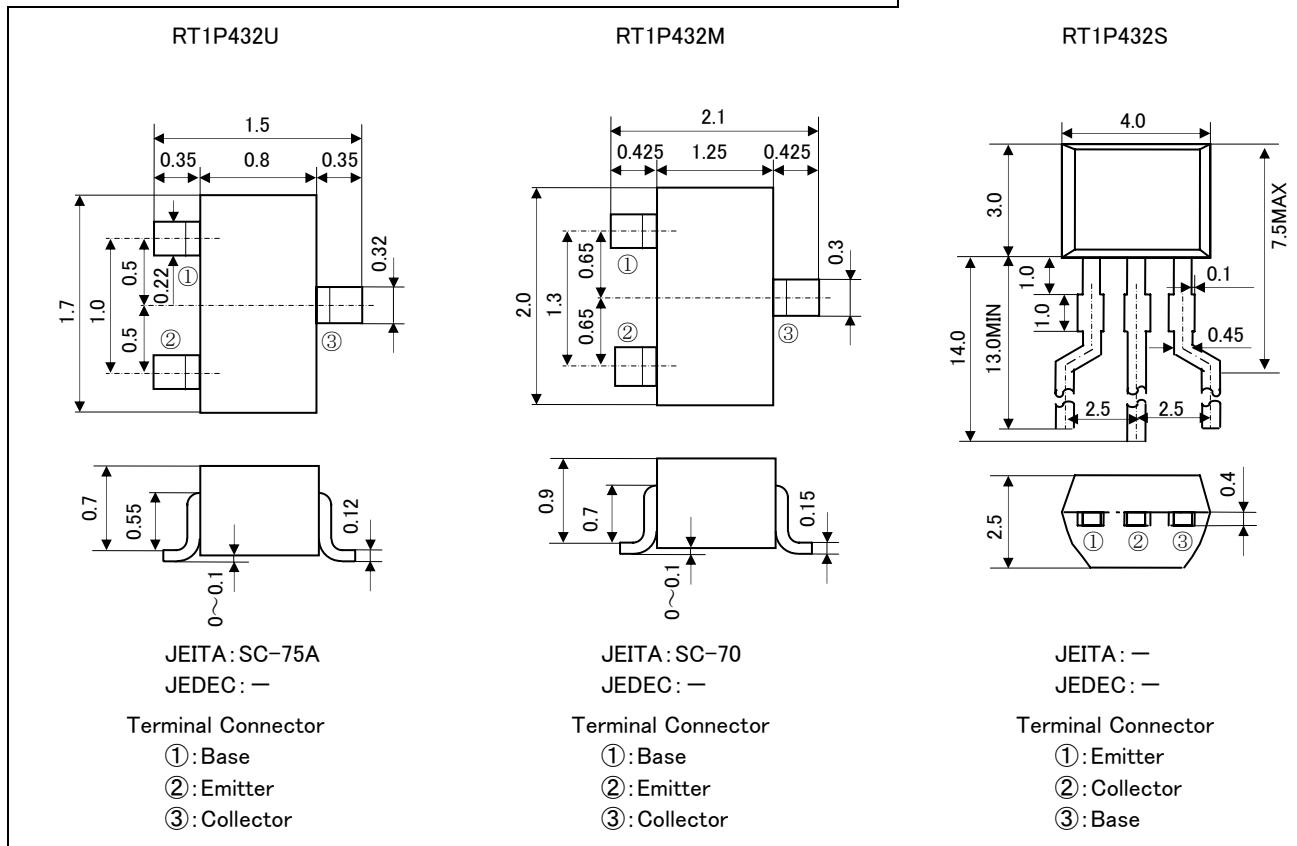
RT1P432C



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

Terminal Connector

- ①: Base
- ②: Emitter
- ③: Collector



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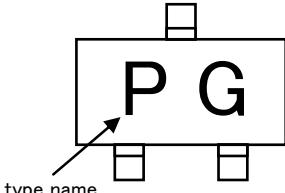
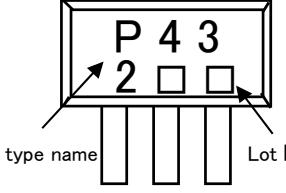
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## MARKING

RT1P432C RT1P432M RT1P432U	RT1P432S
	

## MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING				UNIT
		RT1P432U	RT1P432M	RT1P432C	RT1P432S	
V <sub>CBO</sub>	Collector to Base voltage			-50		V
V <sub>EBO</sub>	Emitter to Base voltage			-7		V
V <sub>CEO</sub>	Collector to Emitter voltage			-50		V
V <sub>IN</sub>	Input voltage			-20		V
I <sub>C</sub>	Collector current			-100		mA
I <sub>CM</sub>	Peak Collector current			-200		mA
P <sub>C</sub>	Collector dissipation(Ta=25°C)	150		200	450	mW
T <sub>j</sub>	Junction temperature			+150		°C
T <sub>stg</sub>	Storage temperature			-55~+150		°C

## ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
V <sub>(BR)CEO</sub>	C to E break down voltage	I <sub>C</sub> =-100 μA, R <sub>BE</sub> =∞	-50	—	—	V
I <sub>CBO</sub>	Collector cut off current	V <sub>CB</sub> =-50V, I <sub>E</sub> =0	—	—	-0.1	μA
I <sub>EBO</sub>	Emitter cut off current	V <sub>EB</sub> =-5V, I <sub>C</sub> =0	-255	-340	-493	μA
h <sub>FE</sub>	DC forward current gain	V <sub>CE</sub> =-5V, I <sub>C</sub> =-10mA	30	—	—	—
V <sub>CE(sat)</sub>	C to E saturation voltage	I <sub>C</sub> =-10mA, I <sub>B</sub> =-0.5mA	—	-0.1	-0.3	V
V <sub>I(ON)</sub>	Input on voltage	V <sub>CE</sub> =-0.2V, I <sub>C</sub> =-5mA	—	-1.0	-1.8	V
V <sub>I(OFF)</sub>	Input off voltage	V <sub>CE</sub> =-5V, I <sub>C</sub> =-100 μA	-0.5	-0.8	—	V
R <sub>1</sub>	Input resistor	—	3.3	4.7	6.1	kΩ
R <sub>2</sub> /R <sub>1</sub>	Resistor ratio	—	1.7	2.1	2.6	—
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =-6V, I <sub>E</sub> =10mA	—	150	—	MHz

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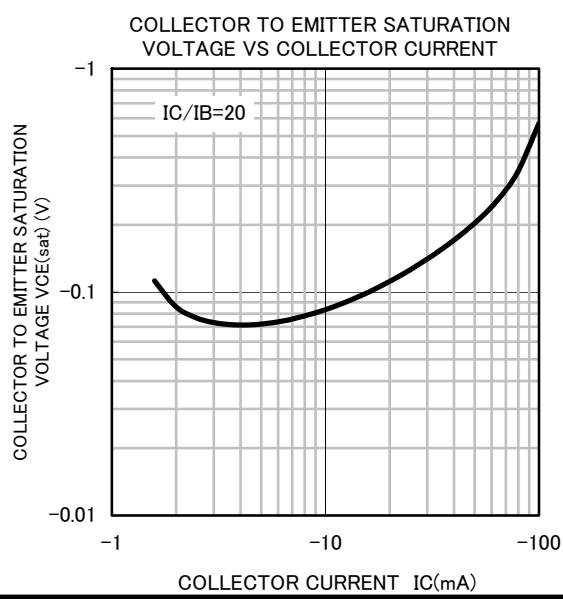
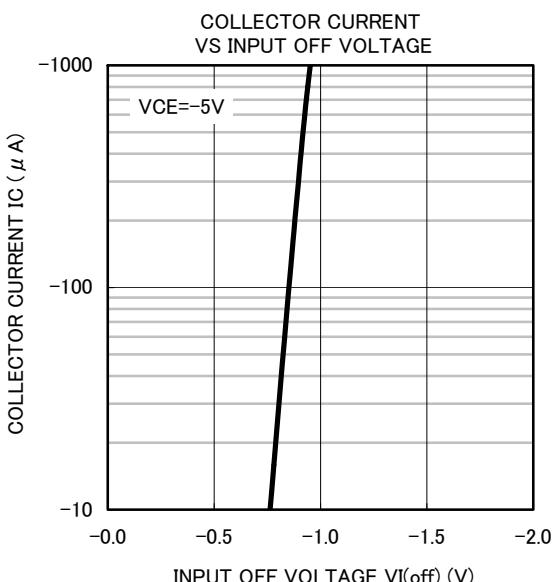
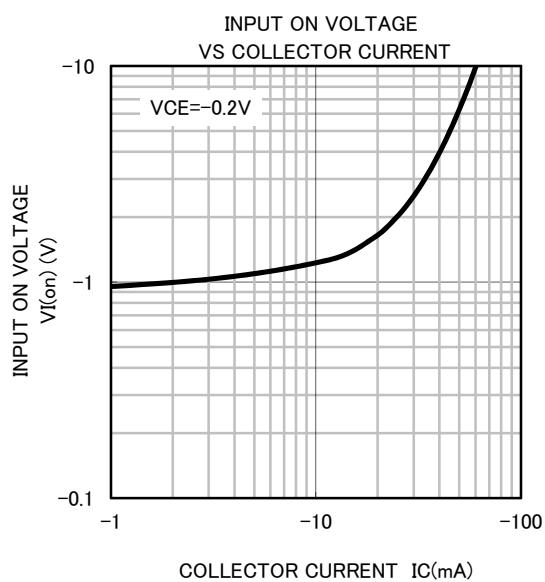
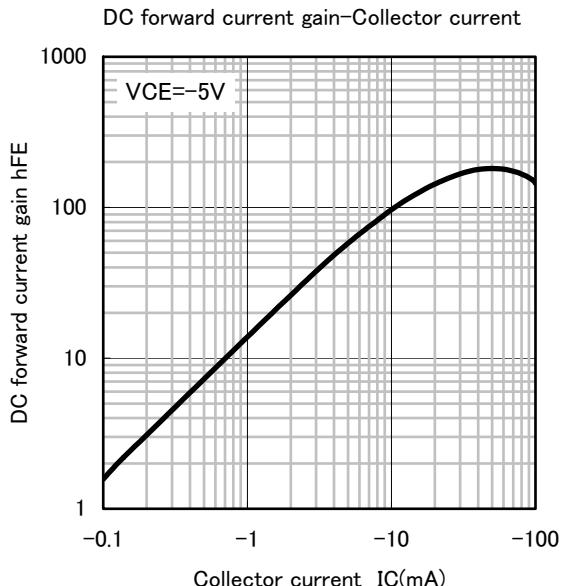
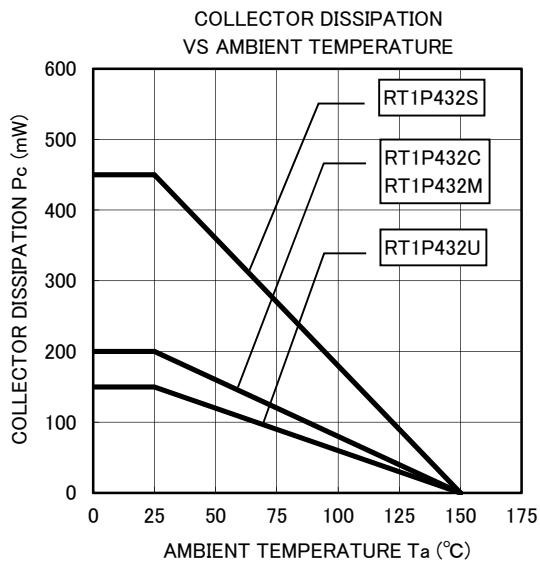
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## TYPICAL CHARACTERISTICS (Ta=25°C)





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