

RT1P440X SERIES

〈Transistor〉

Transistor With Resistor

For Switching Application

Silicon PNP Epitaxial Type

DESCRIPTION

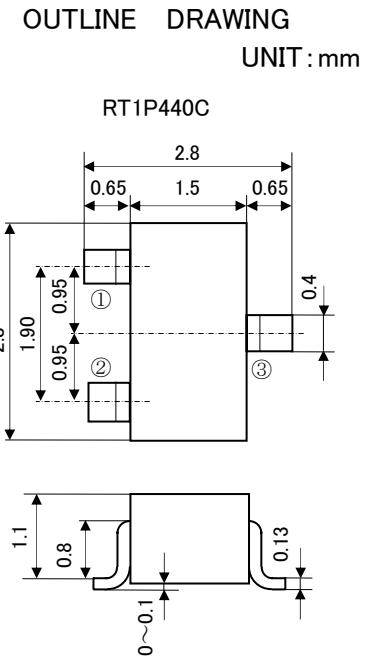
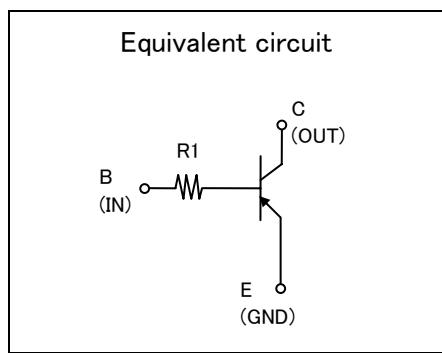
RT1P440X is a one chip transistor with built-in bias resistor, NPN type is RT1N440X.

FEATURE

- Built-in bias resistor ($R_1=47\text{k}\Omega$).

APPLICATION

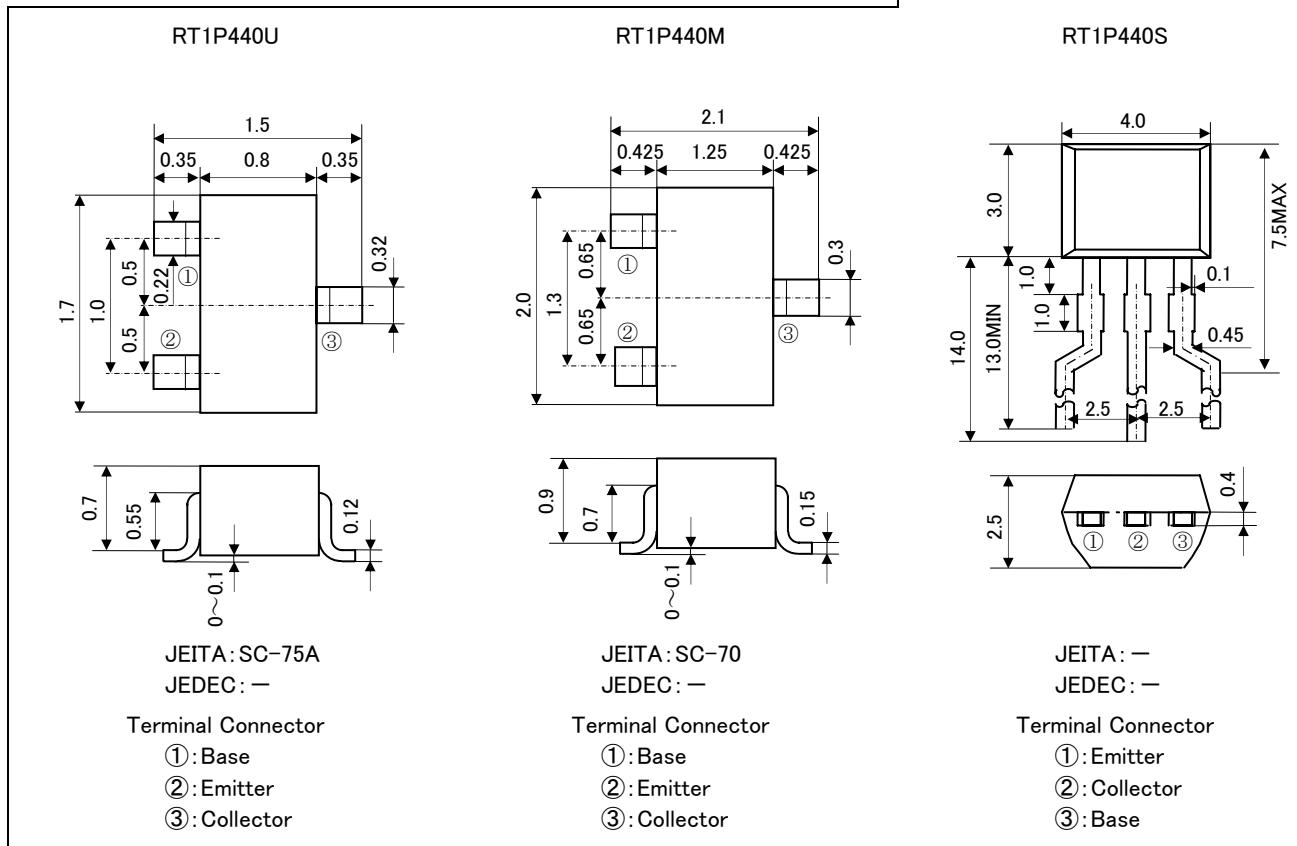
- Inverted circuit, switching circuit, interface circuit, driver circuit.



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

Terminal Connector

- ①: Base
- ②: Emitter
- ③: Collector



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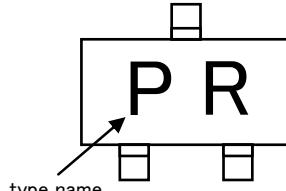
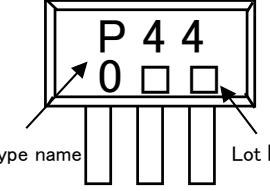
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MARKING

RT1P440C RT1P440M RT1P440U	RT1P440S
	

MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING				UNIT
		RT1P440U	RT1P440M	RT1P440C	RT1P440S	
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 μA, R _{BE} =∞	-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	—	—	-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 =-10mA, I _B =-0.5mA	—	—	-0.3	V
R ₁	Input resistor	—	33	47	61	kΩ
f _T	Gain band width product	V _{CE} =-6V, I _E =10mA	—	150	—	MHz

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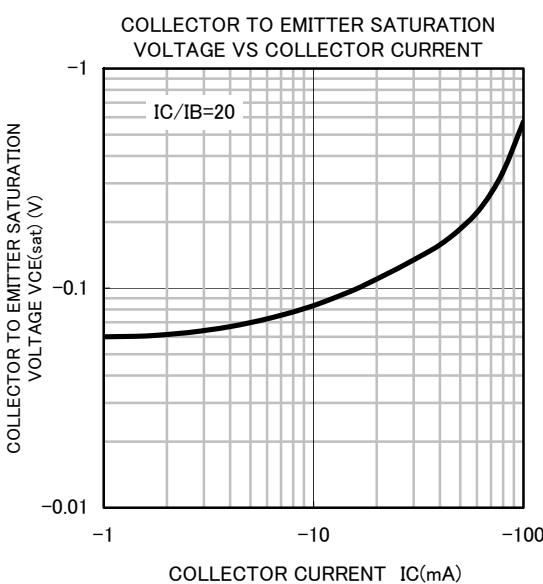
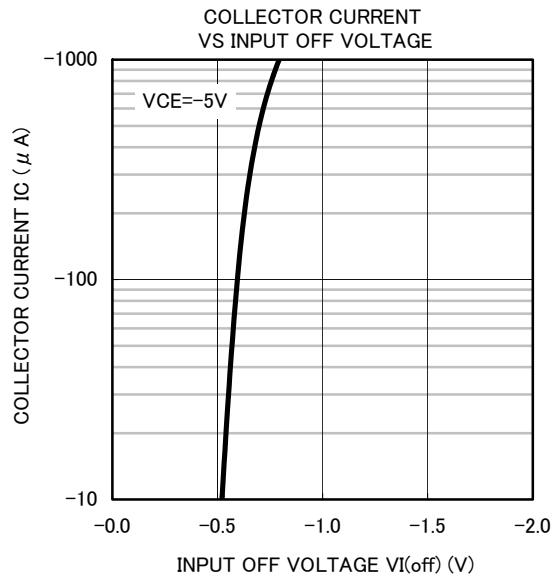
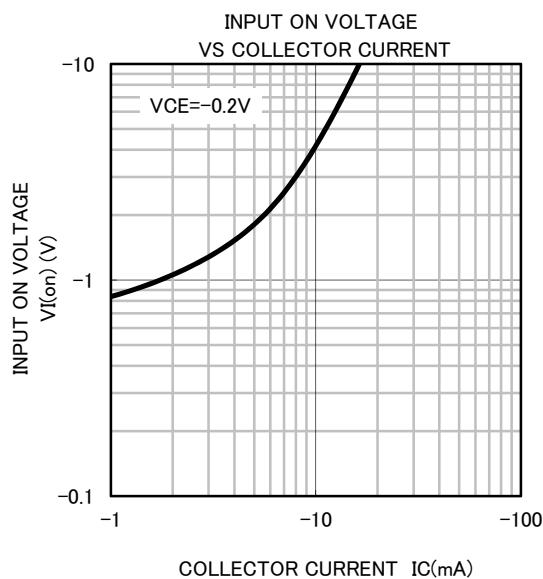
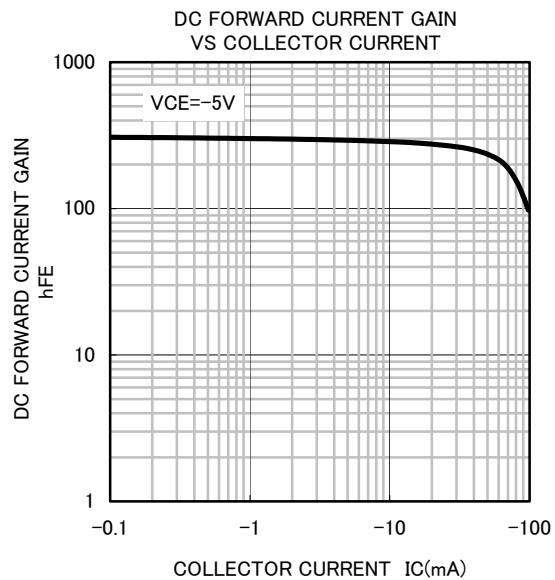
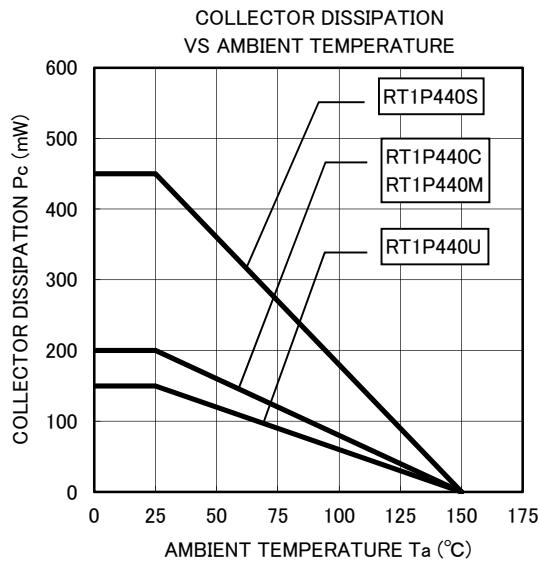
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TYPICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)



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