

RT1P440X SERIES

<Transistor>

Transistor With Resistor
For Switching Application
Silicon PNP Epitaxial Type

DESCRIPTION

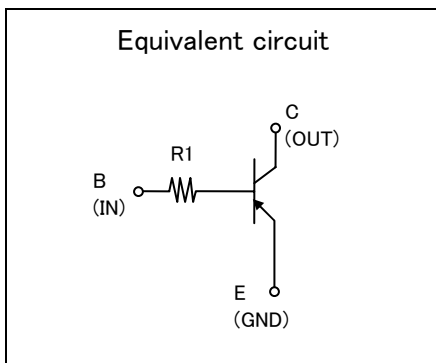
RT1P440X is a one chip transistor with built-in bias resistor, NPN type is RT1N440X.

FEATURE

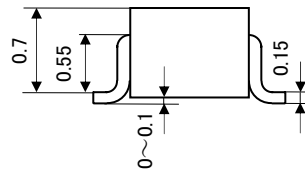
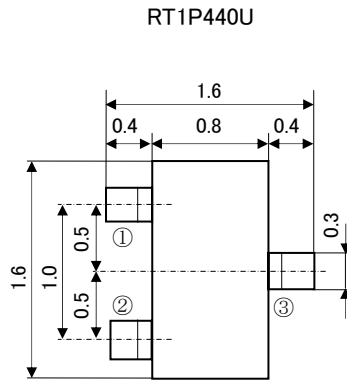
- Built-in bias resistor (R1=47kΩ).

APPLICATION

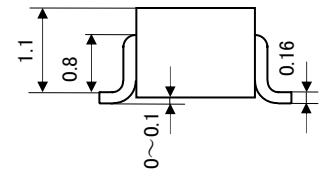
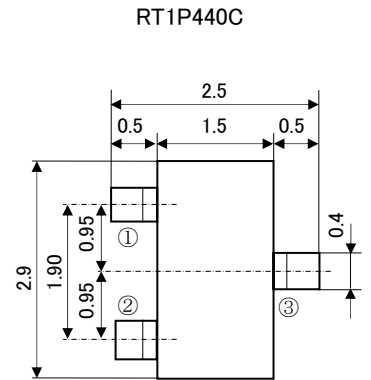
Inverted circuit, switching circuit, interface circuit, driver circuit.



OUTLINE DRAWING UNIT : mm

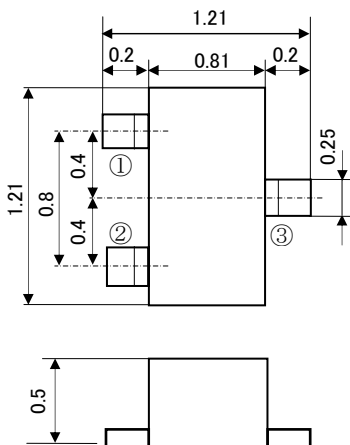


JEITA: —
JEDEC: —
Terminal Connector
①: Base
②: Emitter
③: Collector



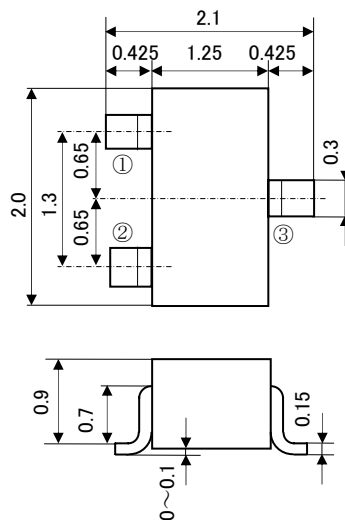
JEITA: SC-59
JEDEC: Similar to TO-236
Terminal Connector
①: Base
②: Emitter
③: Collector

RT1P440T2



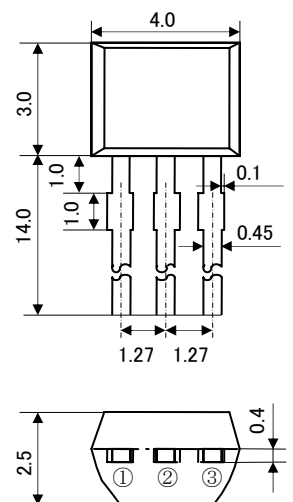
JEITA, JEDEC: —
ISAHAYA: T-USM
Terminal Connector
①: Base
②: Emitter
③: Collector

RT1P440M



JEITA: SC-70
JEDEC: —
Terminal Connector
①: Base
②: Emitter
③: Collector

RT1P440S



JEITA: —
JEDEC: —
Terminal Connector
①: Emitter
②: Collector
③: Base

Transistor With Resistor
For Switching Application
Silicon PNP Epitaxial Type

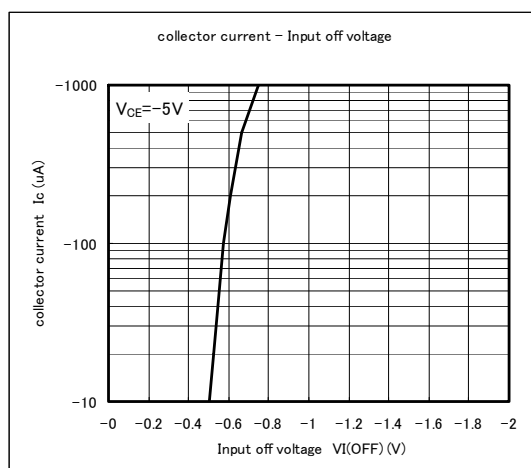
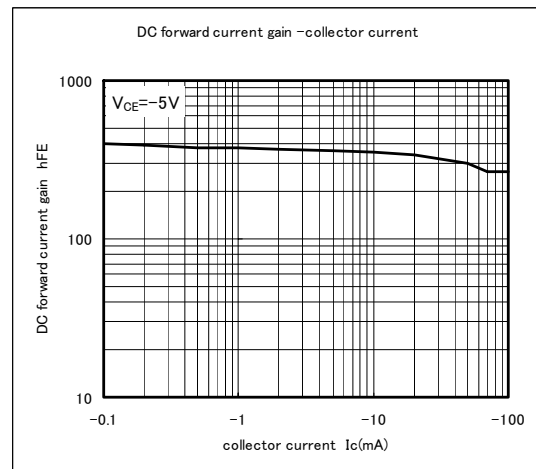
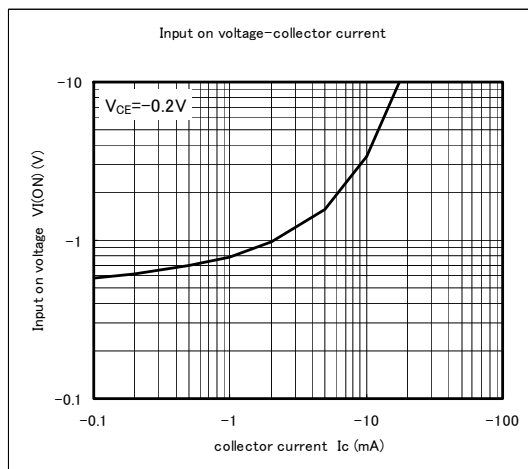
MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING					UNIT
		RT1P440T2	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)	125(※)	150	200	450	mW	
T_j	Junction temperature	+125	+150			°C	
T_{stg}	Storage temperature	-55~+125		-55~+150			°C

ELECTRICAL CHARACTERISTICS (Ta=25°C) (※) package mounted on 9mm × 19mm × 1mm glass-epoxy substrate.

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	$V_{CE} = -5V, I_C = -1mA$	100			—
$V_{CE(sat)}$	C to E saturation voltage	$I_C = -10mA, I_B = -0.5mA$			-0.3	V
R_1	Input resistance		33	47	61	$k\Omega$
f_T	Gain band width product	$V_{CE} = -6V, I_E = 10mA$		150		MHz

TYPICAL CHARACTERISTICS





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