# RT1P440X SERIES

Transistor

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

### **DESCRIPTION**

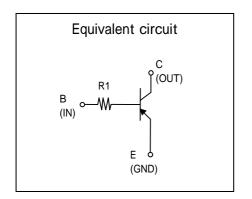
RT1P440X is a one chip transistor with built-in bias resistor,NPN type is RT1N440X.

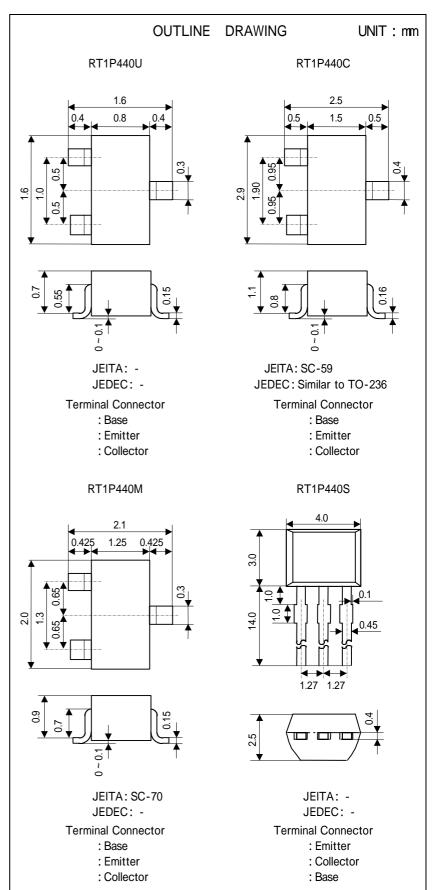
### **FEATURE**

•Built-in bias resistor (R1=47k ).

### **APPLICATION**

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





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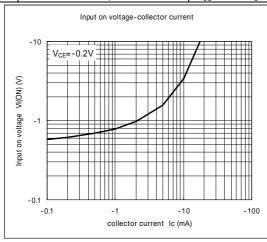
Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

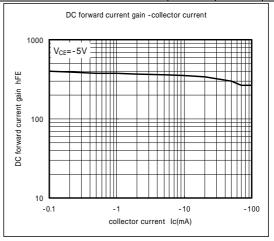
### MAXIMUM RATING (Ta=25 )

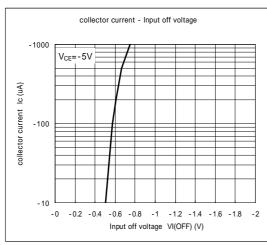
SYMBOL	PARAMETER	RATING				UNIT
		RT1P440U	RT1P440M	RT1P440C	RT1P440S	UNIT
$V_{CBO}$	Collector to Base voltage	-50				
$V_{EBO}$	Emitter to Base voltage	-6				
$V_{CEO}$	Collector to Emitter voltage	-50				
Ι <sub>c</sub>	Collector current	-100				
I <sub>CM</sub>	Peak Collector current	-200				
$P_{c}$	Collector dissipation(Ta=25 )	150	20	00	450	mW
Tj	Junction temperature	+150	+150			
Tstg	Storage temperature	-55 ~ +150	-55 ~ <b>+</b> 150			

## ELECTRICAL CHARACTERISTICS (Ta=25 )

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
		TEST CONDITION	MIN	TYP	MAX	UNIT
$V_{(BR)CEO}$	C to E break down voltage	$I_{C}=-100 \muA$ , $R_{BE}=$	-50			V
I <sub>CBO</sub>	Collector cut off current	$V_{CB}$ =-50V , I $_{E}$ =0			-0.1	μΑ
h <sub>FE</sub>	DC forward current gain	$V_{CE}$ =-5V , I $_{C}$ =-1mA	100			-
$V_{CE(sat)}$	C to E saturation voltage	$I_{C} = -10 \text{mA}$ , $I_{B} = -0.5 \text{mA}$			-0.3	V
R <sub>1</sub>	Input resistance		33	47	61	k
f <sub>⊤</sub>	Gain band width product	$V_{CE}$ =-6V , I <sub>E</sub> =10mA		150		MHz









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