# RT1P436X SERIES

Transistor

Transistor With Resistor For Switching Application Silicon PNP Epitaxial Type

### **DESCRIPTION**

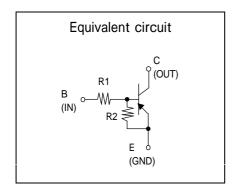
RT1P436X is a one chip transistor with built-in bias resistor,NPN type is RT1N436X.

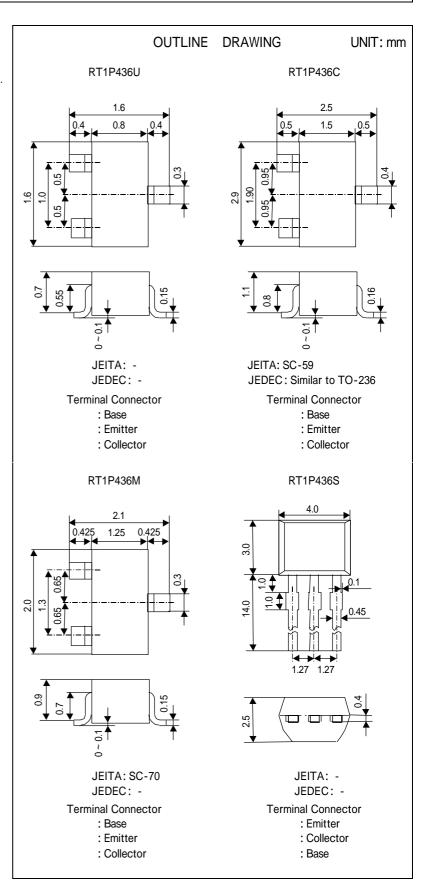
## **FEATURE**

•Built-in bias resistor (R1=4.7k ,R2=47k ).

### **APPLICATION**

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





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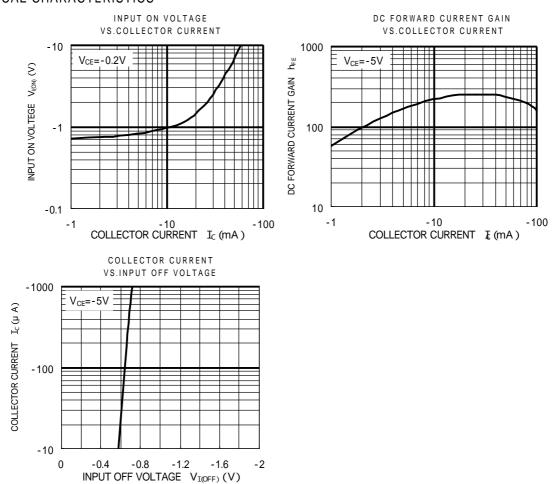
# MAXIMUM RATING (Ta=25 )

SYMBOL	PARAMETER	RATING				UNIT
		RT1P436U	RT1P436M	RT1P436C	RT1P436S	UNIT
$V_{CBO}$	Collector to Base voltage	-50				
$V_{EBO}$	Emitter to Base voltage	-6				
V <sub>CEO</sub>	Collector to Emitter voltage	-50				
Ic	Collector current	-100				
I <sub>CM</sub>	Peak Collector current	-200				
P <sub>c</sub>	Collector dissipation(Ta=25 )	150	2	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
			MIN	TYP	MAX	UNIT
$V_{(BR)CEO}$	C to E break down voltage	I <sub>C</sub> =-100 μ A , R <sub>BE</sub> =	-50			V
I <sub>CBO</sub>	Collector cut off current	$V_{CB}$ =-50V , $I_{E}$ =0			-0.1	μA
h <sub>FE</sub>	DC forward current gain	$V_{CE}$ =-5V , I $_{C}$ =-10mA	80			-
$V_{CE(sat)}$	C to E saturation voltage	$I_{C} = -10$ mA, $I_{B} = -0.5$ mA		-0.1	-0.3	V
$V_{I(ON)}$	Input on voltage	$V_{CE}$ =-0.2V , I $_{C}$ =-5mA		-0.8	-1.4	V
$V_{I(OFF)}$	Input off voltage	$V_{CE}$ =-5V , I $_{C}$ =-100 $\mu$ A	-0.4	-0.6		V
R <sub>1</sub>	Input resistance		3.3	4.7	6.1	k
$R_2/R_1$	Resistance ratio		8	10	12	
f <sub>⊤</sub>	Gain band width product	V <sub>CE</sub> =-6V , I <sub>E</sub> =10mA		150		MHz

# TYPICAL CHARACTERISTICS





Marketing division, Marketing planning department

6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

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