## RT1N150X SERIES

Transistor

Transistor With Resistor For Switching Application Silicon NPN Epitaxial Type

## **DESCRIPTION**

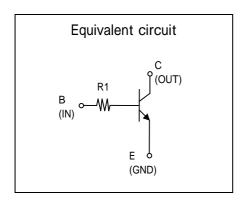
RT1N150X is a one chip transistor with built-in bias resistor,PNP type is RT1P150X.

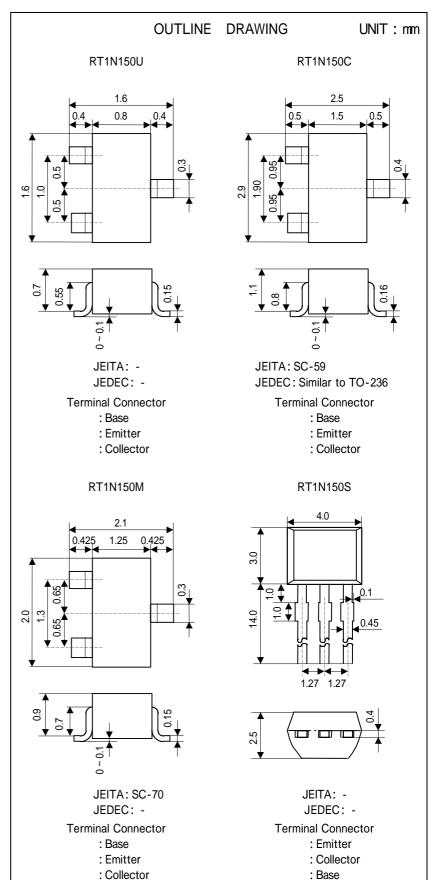
#### **FEATURE**

www.DataSheet4U .Built-in bias resistor (R1=100k ).

#### **APPLICATION**

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





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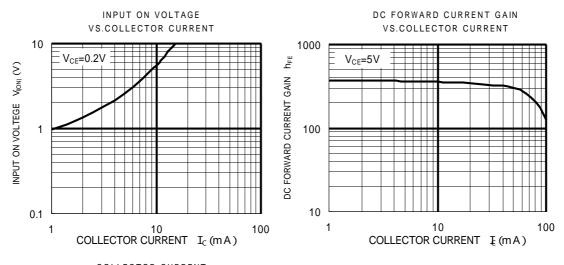
## MAXIMUM RATING (Ta=25 )

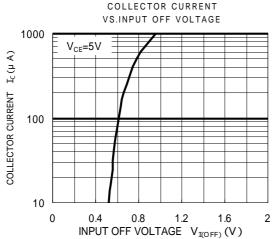
SYMBOL	PARAMETER	RATING				UNIT
		RT1N150U	RT1N150M	RT1N150C	RT1N150S	UNIT
$V_{CBO}$	Collector to Base voltage		V			
$V_{EBO}$	Emitter to Base voltage		V			
$V_{CEO}$	Collector to Emitter voltage		V			
Ι <sub>c</sub>	Collector current		mA			
I <sub>CM</sub>	Peak Collector current	200				
$P_{c}$	Collector dissipation(Ta=25 )	150	20	0	450	mW
t <sup>4U.co</sup> j	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	$I_{C}=100 \mu A, R_{BE}=$	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	$I_C = 1 \text{mA}$ , $I_B = 0.1 \text{mA}$			0.3	V
R <sub>1</sub>	Input resistance			100		k
$f_{\scriptscriptstyleT}$	Gain band width product	$V_{CE}=6V$ , $I_{E}=-10mA$		200		MHz

## TYPICAL CHARACTERISTICS







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