

# RT2P23M

Composite Transistor With Resistor  
For Switching Application  
Silicon PNP Epitaxial Type

## DESCRIPTION

RT2P23M is composite transistor with built-in bias resistor.

## FEATURE

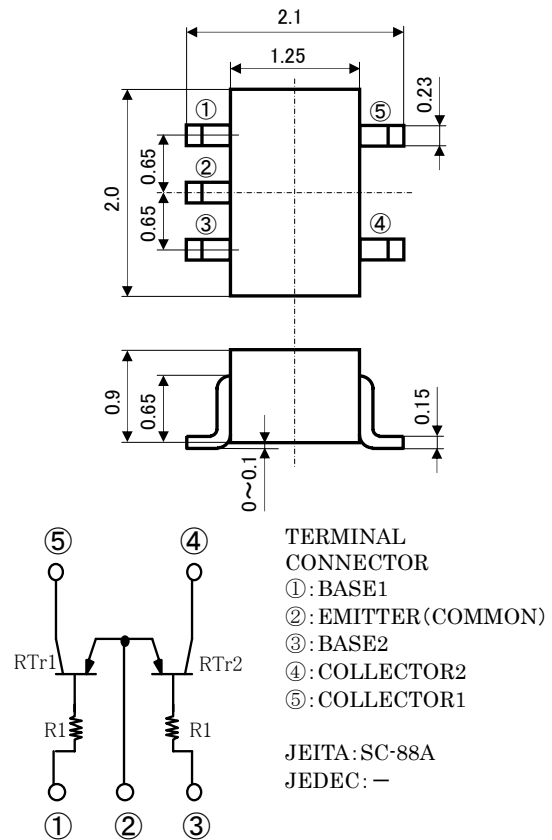
Built-in bias resistor ( $R_1=47k\Omega$ )  
Mini package for easy mounting

## APPLICATION

Inverted circuit, Switching circuit,  
Interface circuit, Driver circuit

## OUTLINE DRAWING

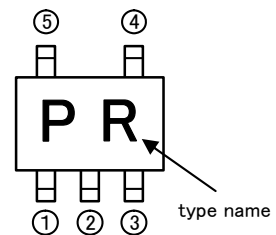
Unit: mm



## MAXIMUM RATING ( $T_a=25^\circ\text{C}$ ) (RT1, RT2 COMMON)

SYMBOL	PARAMETER	RATING	UNIT
VCBO	Collector to Base voltage	-50	V
VEBO	Emitter to Base voltage	-6	V
VCEO	Collector to Emitter voltage	-50	V
IC	Collector current	-100	mA
ICM	Peak Collector current	-200	mA
PT	Total dissipation	200	mW
T <sub>j</sub>	Junction temperature	+150	°C
T <sub>stg</sub>	Storage temperature	-55~+150	°C

## MARKING



## ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ ) (RT1, RT2 COMMON)

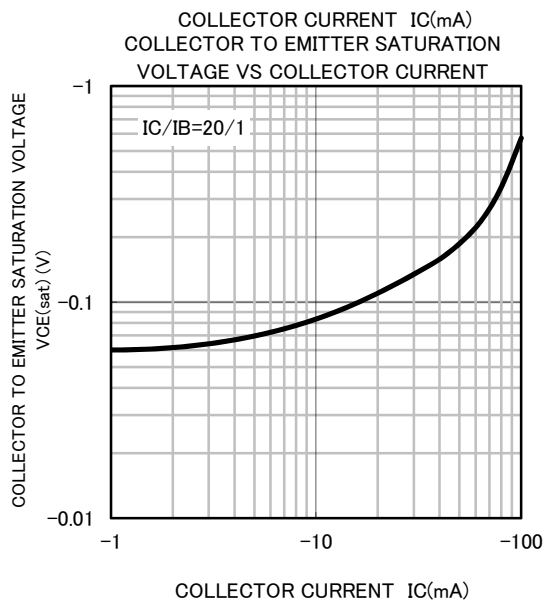
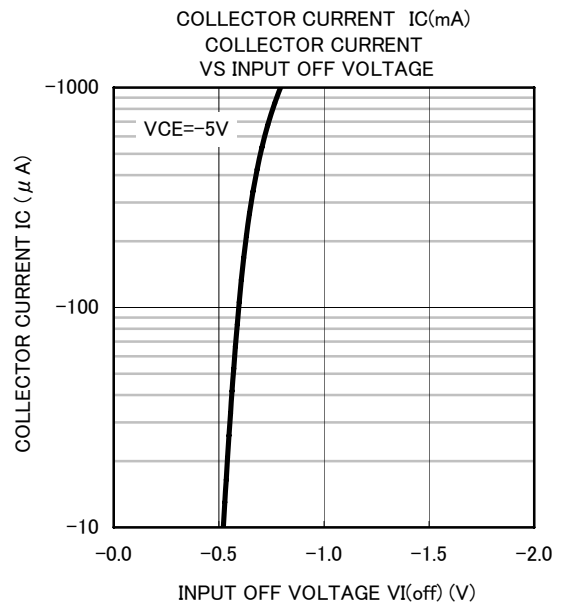
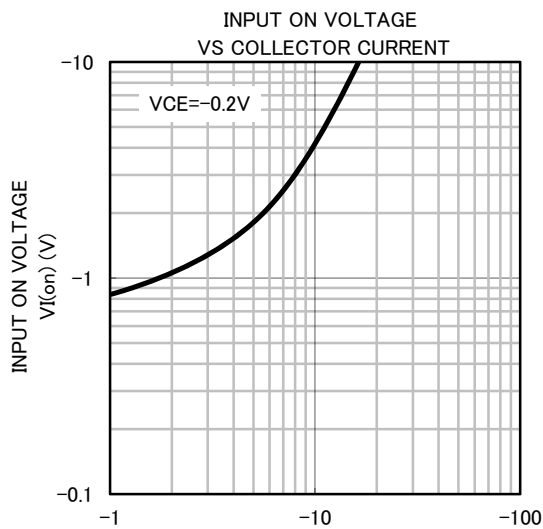
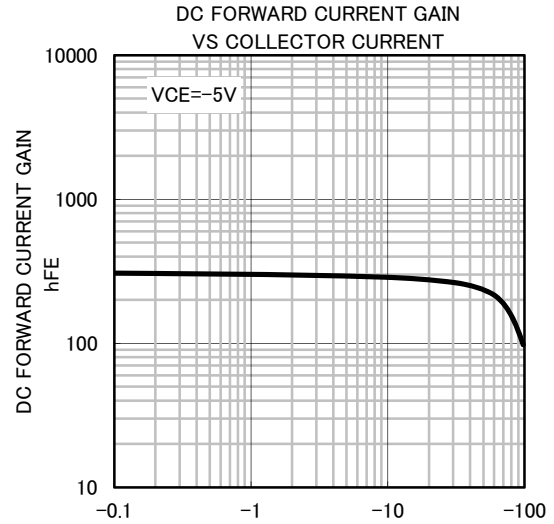
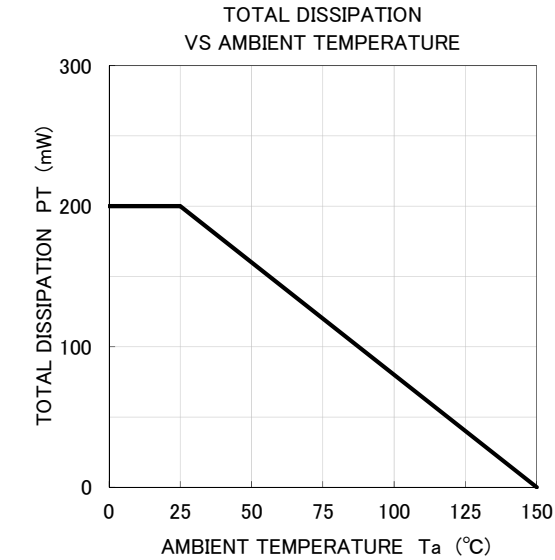
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
V <sub>(BR)CEO</sub>	Collector to Emitter breakdown voltage	I <sub>C</sub> =-100 μA, R <sub>BE</sub> =∞	-50	-	-	V
ICBO	Collector cut off current	V <sub>CB</sub> =-50V, I <sub>E</sub> =0	-	-	-0.1	μA
IEBO	Emitter cut off current	V <sub>EB</sub> =-5V, I <sub>C</sub> =0	-	-	-0.1	μA
h <sub>FE</sub>	DC forward current gain	V <sub>CE</sub> =-5V, I <sub>C</sub> =-1mA	100	-	-	-
V <sub>CE(sat)</sub>	Collector to Emitter saturation voltage	I <sub>C</sub> =-10mA, I <sub>B</sub> =-0.5mA	-	-	-0.3	V
R <sub>1</sub>	Input resistor	-	33	47	61	kΩ
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =-6V, I <sub>E</sub> =10mA	-	150	-	MHz

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## TYPICAL CHARACTERISTICS

( $T_a=25^\circ\text{C}$ )( $R_{Tr1}, R_{Tr2}$  COMMON)





**Keep safety first in your circuit designs!**

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