

RT2N21M

Composite Transistor With Resistor
For Switching Application
Silicon NPN Epitaxial Type

DESCRIPTION

RT2N21M is composite transistor with built-in bias resistor.

FEATURE

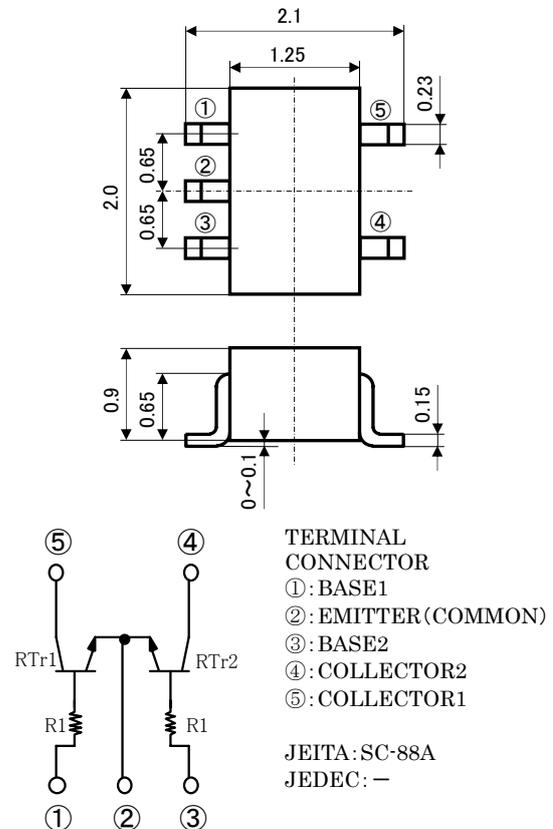
- Built-in bias resistor ($R_1=10k\Omega$)
- Mini package for easy mounting

APPLICATION

- Inverted circuit, Switching circuit,
- Interface circuit, Driver circuit

OUTLINE DRAWING

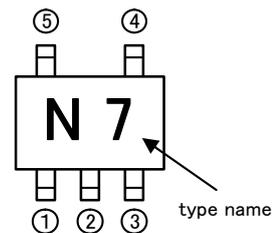
Unit: mm



MAXIMUM RATING ($T_a=25^\circ\text{C}$) (R_{Tr1} , R_{Tr2} 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 _j	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55 ~ +150	°C

MARKING



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

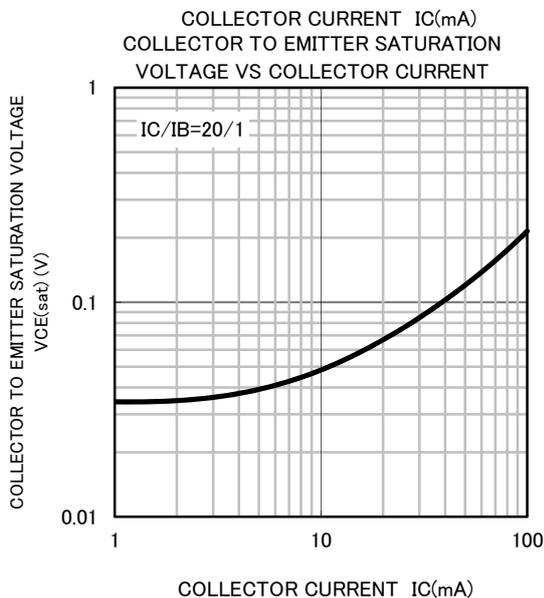
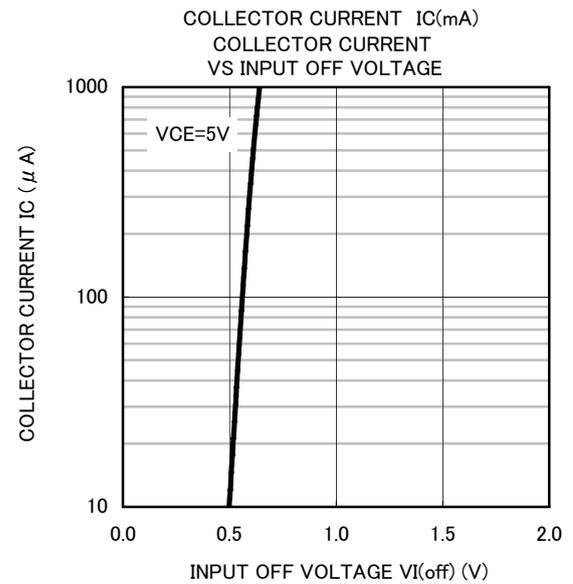
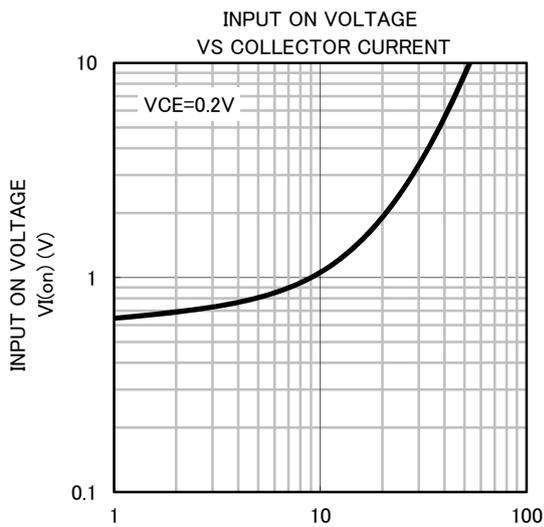
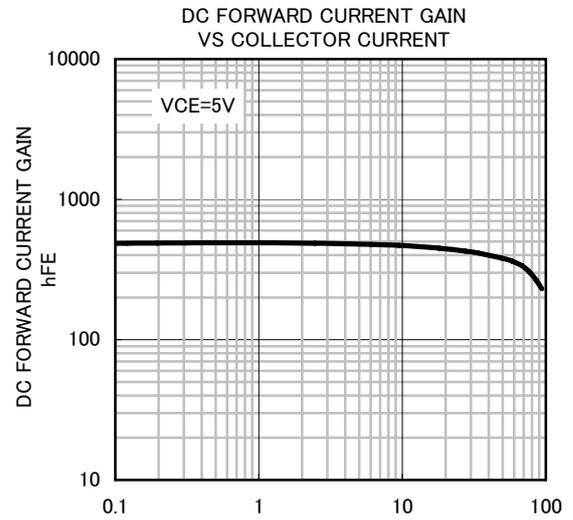
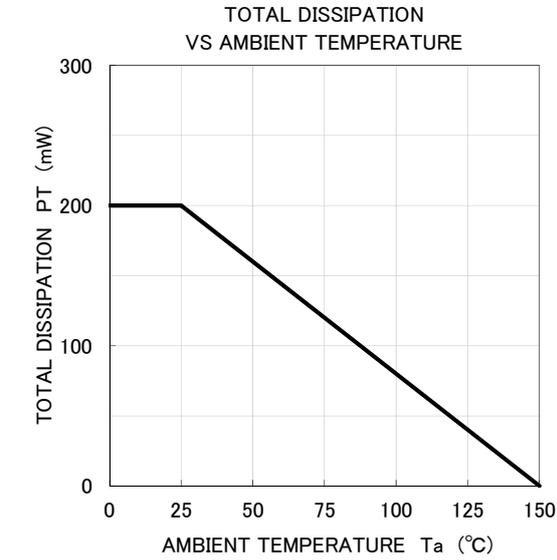
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
V _{(BR)CEO}	Collector to Emitter breakdown voltage	I _C =100 μA, R _{BE} =∞	50	-	-	V
ICBO	Collector cut off current	V _{CB} =50V, I _E =0	-	-	0.1	μA
IEBO	Emitter cut off current	V _{EB} =5V, I _C =0	-	-	0.1	μA
h _{FE}	DC forward current gain	V _{CE} =5V, I _C =1mA	100	-	-	-
V _{CE(sat)}	Collector to Emitter saturation voltage	I _C =10mA, I _B =0.5mA	-	0.1	0.3	V
R ₁	Input resistor	-	7	10	13	kΩ
f _T	Gain band width product	V _{CE} =6V, I _E =-10mA	-	200	-	MHz

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TYPICAL CHARACTERISTICS

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



COLLECTOR CURRENT I_C (mA)



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