

RT2N07M

COMPOSITE TRANSISTOR WITH RESISTOR
FOR SWITCHING APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

RT2N07M is a composite transistor with built-in bias resistor

FEATURE

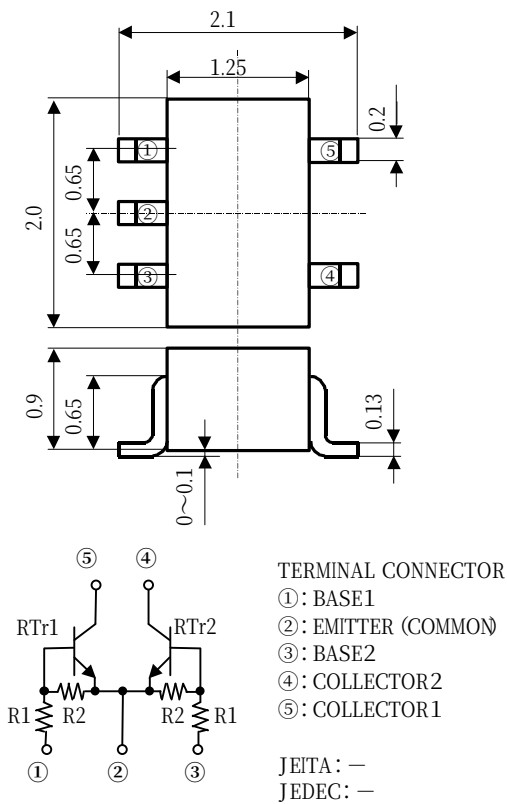
- Built-in bias resistor (R1=1 K Ω , R2=10K Ω)
- Mini package for easy mounting

APPLICATION

Inverted circuit , switching circuit , interface circuit , driver circuit

OUTLINE DRAWING

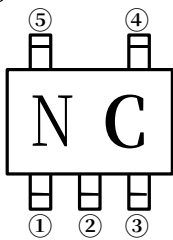
Unit:mm



MAXIMUM RATINGS (Ta=25°C (RT1, RT2))

Symbol	Parameter	Ratings	Unit
V _{CBO}	Collector to Base voltage	50	V
V _{EBO}	Emitter to Base voltage	6	V
V _{CEO}	Collector to Emitter voltage	50	V
I _C	Collector current	100	mA
I _{CM}	Peak Collector current	200	mA
P _C	Collector dissipation (Total Ta=25°C)	150	mW
T _j	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55~+150	°C

MARKING



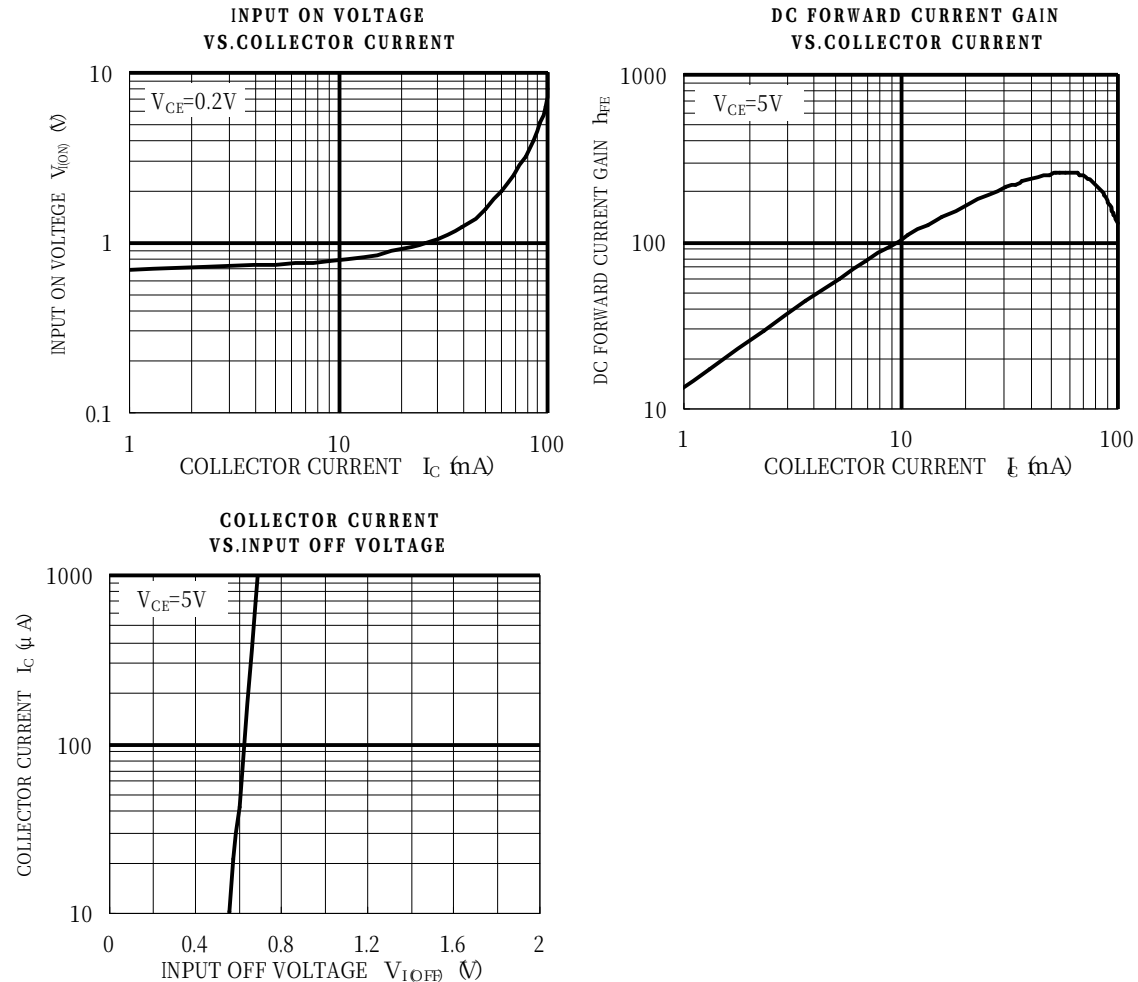
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ELECTRICAL CHARACTERISTICS (Ta=25°C) (R_{Tr1}, R_{Tr2})

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V _{(BR)CEO}	Collector to Emitter break down voltage	I _C =100 μA, R _{BE} =∞	50	-	-	V
I _{CBO}	Collector cut off current	V _{CB} =50V, I _E =0mA	-	-	0.1	μA
h _{FE}	DC forward current gain	V _{CE} =5V, I _C =5mA	33	-	-	-
V _{CE(sat)}	Collector to Emitter saturation voltage	I _C =10mA, I _B =0.5mA	-	0.1	0.3	V
V _{I(ON)}	Input on voltage	V _{CE} =0.2V, I _C =5mA	-	0.7	1.2	V
V _{I(OFF)}	Input off voltage	V _{CE} =5V, I _C =100 μA	0.4	0.6	-	V
R _I	Input resistor		0.7	1.0	1.3	KΩ
R ₂ /R ₁	Resistor ratio		8	10	12	-
f _T	Gain band width product	V _{CE} =6V, I _E =-10mA	-	200	-	MHz

TYPICAL CHARACTERISTICS (Tr1, Tr2)





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