

RT2N16M

Composite Transistor With Resistor
For Switching Application
Silicon NPN Epitaxial Type

DESCRIPTION

RT2N16M is composite transistor with built-in bias resistor.

FEATURE

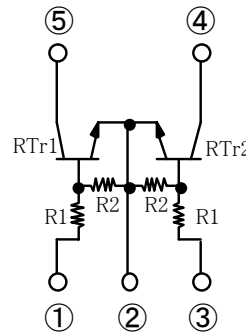
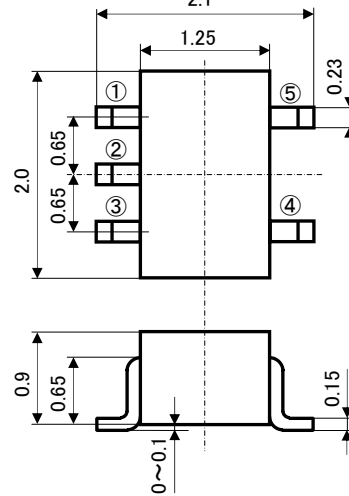
Built-in bias resistor (R1=47k Ω , R2=10k Ω)
Mini package for easy mounting

APPLICATION

Inverted circuit, Switching circuit,
Interface circuit, Driver circuit

OUTLINE DRAWING

Unit: mm



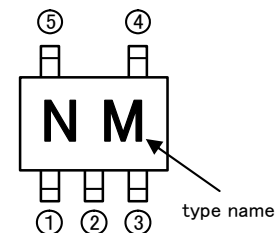
TERMINAL CONNECTOR
①: BASE1
②: EMITTER(COMMON)
③: BASE2
④: COLLECTOR2
⑤: COLLECTOR1

JEITA: SC-88A
JEDEC: -

MAXIMUM RATING(T_a=25°C)(RTr1, RTr2 COMMON)

SYMBOL	PARAMETER	RATING	UNIT
V _{CB0}	Collector to Base voltage	50	V
V _{EBO}	Emitter to Base voltage	15	V
V _{CEO}	Collector to Emitter voltage	50	V
V _{IN}	Input voltage	40	V
I _C	Collector current	100	mA
I _{CM}	Peak Collector current	200	mA
P _T	Total dissipation	200	mW
T _j	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55~+150	°C

MARKING



ELECTRICAL CHARACTERISTICS(T_a=25°C)(RTr1, RTr2 COMMON)

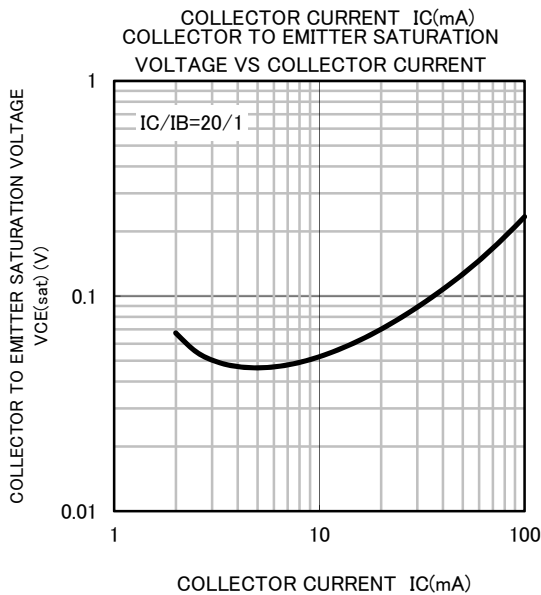
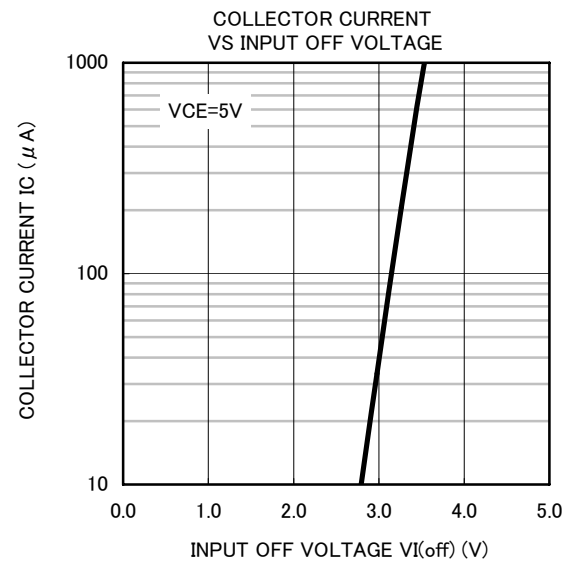
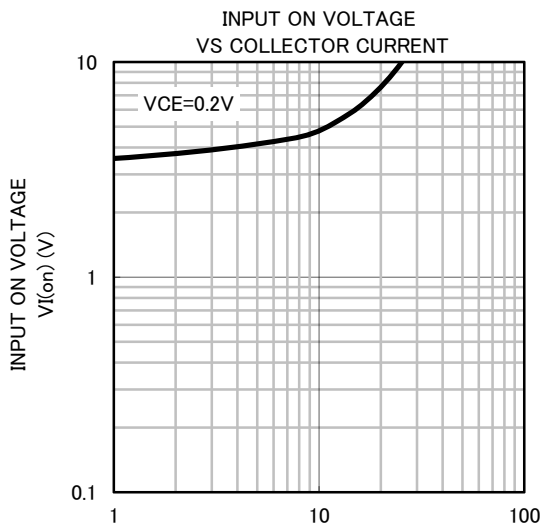
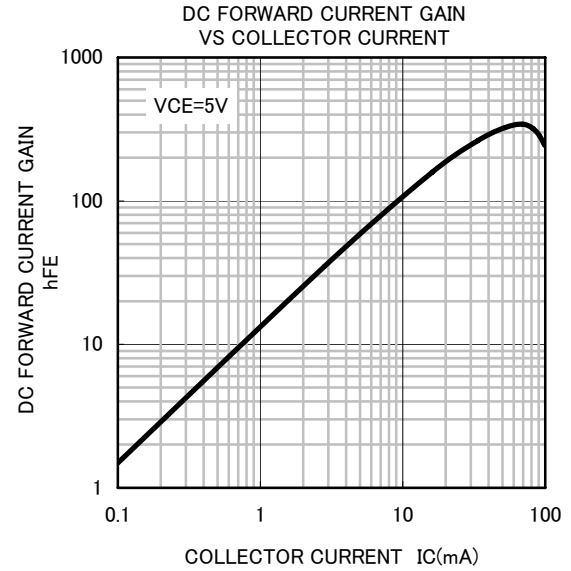
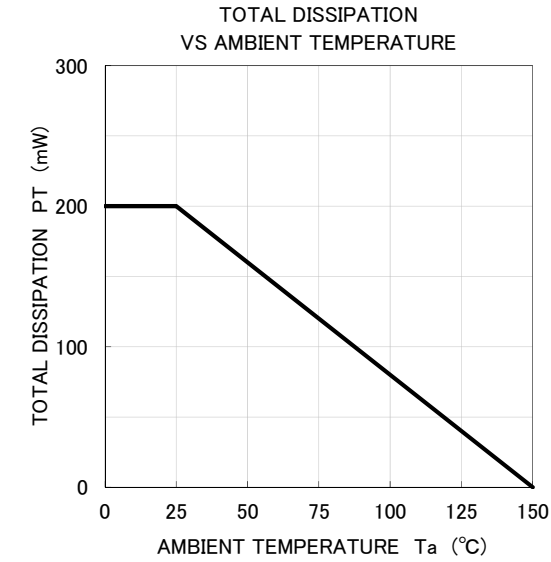
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
V _{(BR)CEO}	Collector to Emitter breakdown voltage	I _C =100 μ A, R _{BE} = ∞	50	-	-	V
I _{CBO}	Collector cut off current	V _{CB} =50V, I _E =0	-	-	0.1	μ A
I _{EBO}	Emitter cut off current	V _{EB} =5V, I _C =0	66	88	127	μ A
h _{FE}	DC forward current gain	V _{CE} =5V, I _C =5mA	33	-	-	-
V _{CE(sat)}	Collector to Emitter saturation voltage	I _C =10mA, I _B =0.5mA	-	-	0.3	V
V _{I(ON)}	Input on voltage	V _{CE} =0.2V, I _C =5mA	-	4.2	8.9	V
V _{I(OFF)}	Input off voltage	V _{CE} =5V, I _C =100 μ A	2.3	3.1	-	V
R ₁	Input resistor	-	33	47	61	k Ω
R ₂ /R ₁	Resistor ratio	-	0.17	0.21	0.26	-
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)





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