

RT2N21M

COMPOSITE TRANSISTOR WITH RESISTOR
FOR SWITCHING APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

RT2N21M is a composite transistor with built-in bias resistor

FEATURE

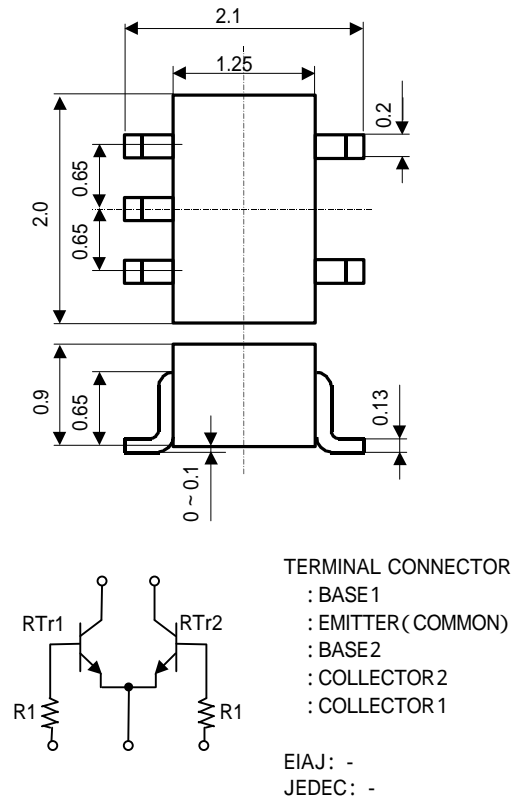
- Built-in bias resistor ($R1=10\text{ K}$)
- Mini package for easy mounting

APPLICATION

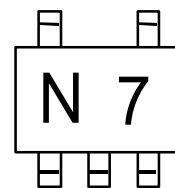
Inverted circuit , switching circuit , interface circuit , driver circuit

OUTLINE DRAWING

Unit:mm

**MAXIMUM RATINGS** ($T_a=25^\circ\text{C}$) (RTr1, RTr2)

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 $T_a=25^\circ\text{C}$)	150	mW
T_j	Junction temperature	+ 150	
T_{stg}	Storage temperature	-55 ~ + 150	

MARKING

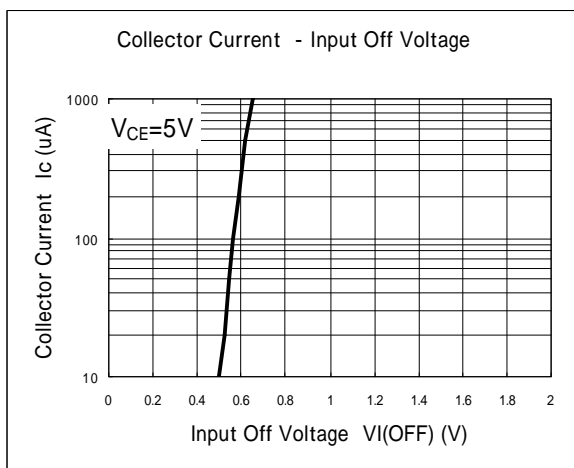
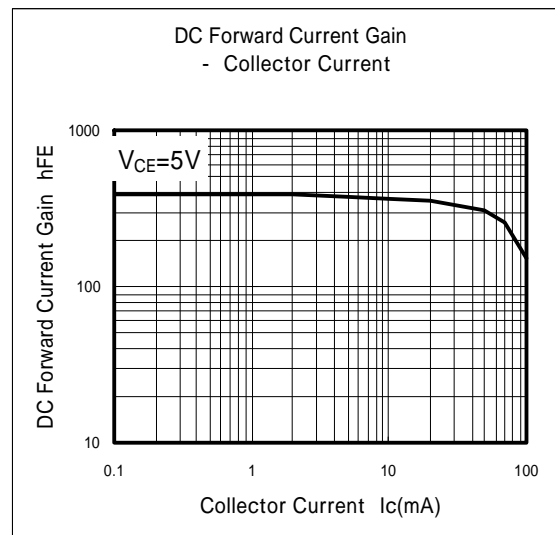
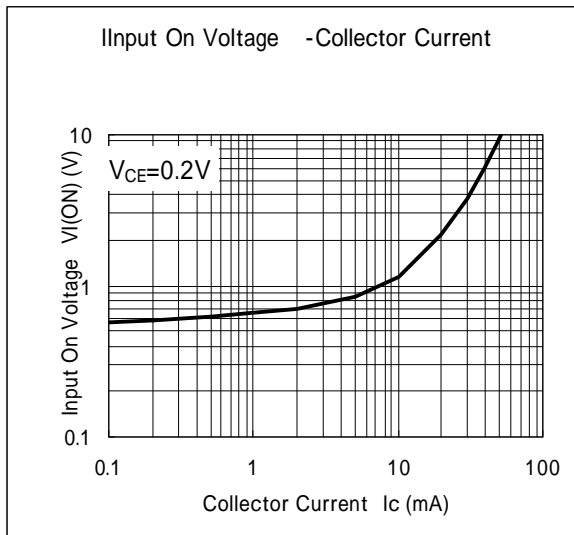
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ELECTRICAL CHARACTERISTICS (Ta=25 °C)(RT1, RT2)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to E break down voltage	$I_C=100 \mu A, R_{BE}=\infty$	50	-	-	V
I_{CBO}	Collector cut off current	$V_{CB}=50V, I_E=0$	-	-	0.1	μA
h_{FE}	DC forward current gain	$V_{CE}=5V, I_C=1mA$	100	-	-	-
$V_{CE(sat)}$	C to E saturation voltage	$I_C=10mA, I_B=0.5mA$	-	0.1	0.3	V
R_1	Input resistor		7	10	13	K
f_T	Gain band width product	$V_{CE}=6V, I_E=-10mA$		200		MHz

TYPICAL CHARACTERISTICS (Tr1, Tr2)





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