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RT2N14M

COMPOSITE TRANSISTOR WITH RESISTOR
FOR SWITCHING APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

RT2N14M is a composite transistor with built-in bias resistor

FEATURE

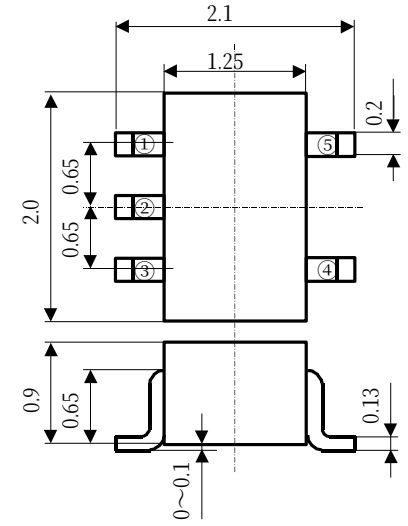
- Built-in bias resistor (R1=10KΩ , R2=47KΩ)
- Mini package for easy mounting

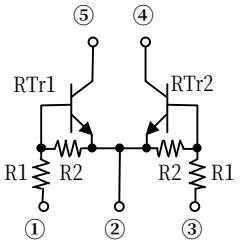
APPLICATION

Inverted circuit , switching circuit , interface circuit , driver circuit

OUTLINE DRAWING

Unit:mm





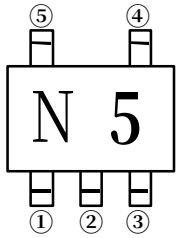
TERMINAL CONNECTOR
①: BASE1
②: EMITTER (COMMON)
③: BASE2
④: COLLECTOR2
⑤: COLLECTOR1

JEITA: SC-88A

MAXIMUM RATINGS (Ta=25°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 Ta=25°C)	150	mW
T_j	Junction temperature	+150	°C
T_{stg}	Storage temperature	-55～+150	°C

MARKING



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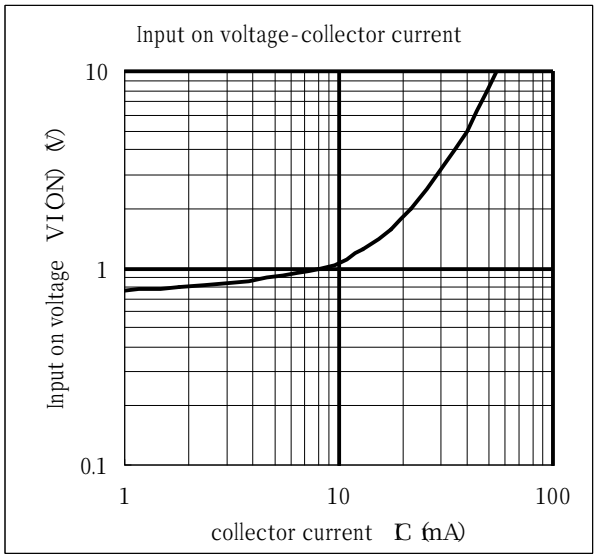
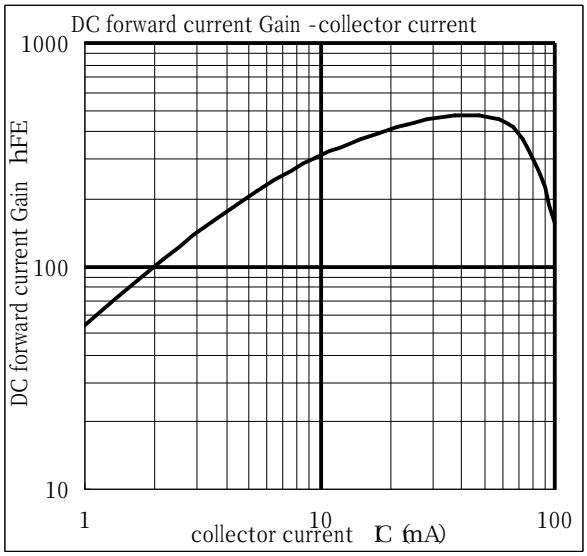
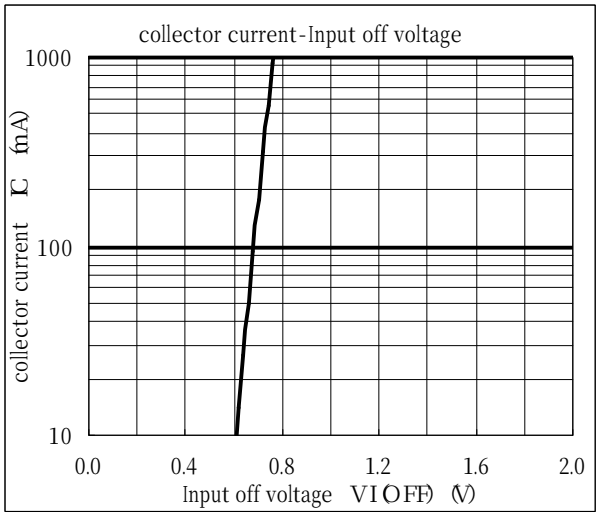
ELECTRICAL CHARACTERISTICS (Ta=25°C) (RTr1, RTr2)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	Collector to Emitter break down voltage	I_C=100μA, R_{BE}=∞	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, IC=5mA	50	-	-	-
$V_{CE(sat)}$	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	-	1.0	1.8	V
$V_{I(OFF)}$	Input off voltage	V_{CE}=5V, I_C=100μA	0.4	0.7	-	V
R_1	Input resistor		7	10	13	KΩ
R_2/R_1	Resistor ratio		4.2	4.7	5.1	-
f_T	Gain band width product	V_{CE}=6V, I_E=-10mA		200		MHz

TYPICAL Characteristics (Tr1, Tr2)







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