

RT3T11M

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3T11M is a composite transistor built with RT1N141 chip and RT1P141 chip in SC-88 package.

FEATURE

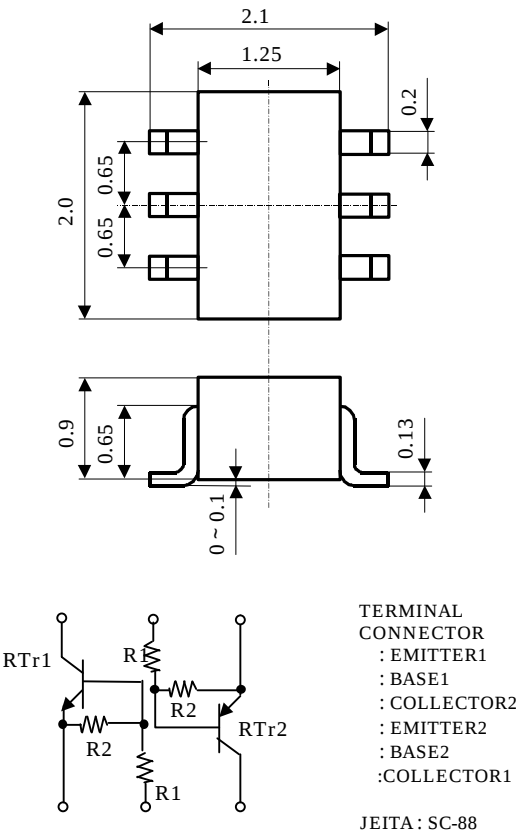
- Silicon epitaxial type
- Each transistor elements are independent.
- Mini package for easy mounting

APPLICATION

- Inverted circuit, switching circuit,
- interface circuit, driver circuit

OUTLINE DRAWING

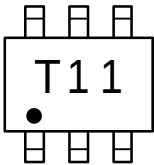
Unit: mm



MAXIMUM RATING (Ta=25)

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	50	V
V_{EBO}	Emitter to Base voltage	10	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)	150	mW
T_j	Junction temperature	+ 150	
T_{stg}	Storage temperature	-55 ~ + 150	

MARKING



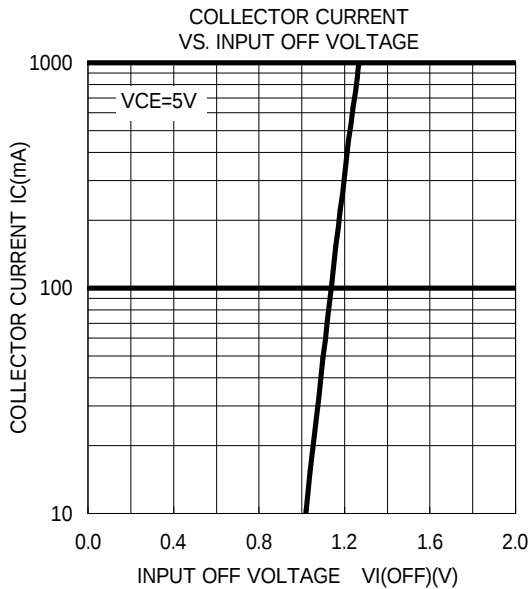
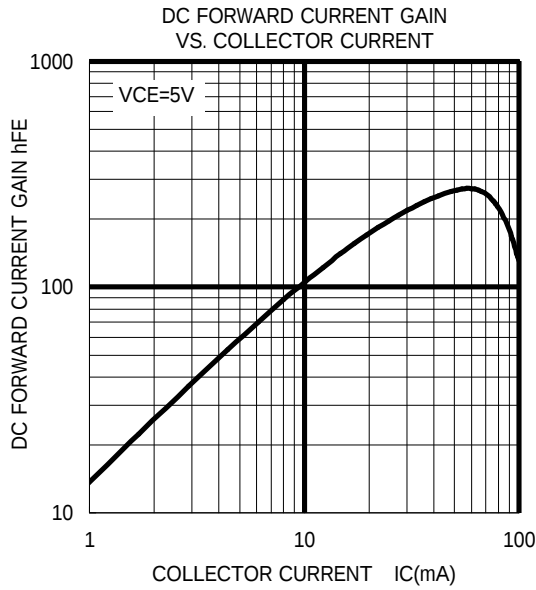
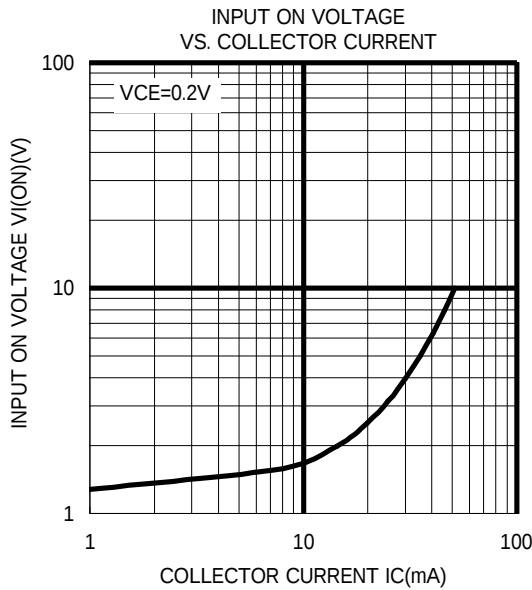
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ELECTRICAL CHARACTERISTICS (Ta=25)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CEO}$	Collector to Emitter break down voltage	$I_C=100\text{ }\mu\text{A}, R_{BE}=\infty$	50	-	-	V
I_{CBO}	Collector cut off current	$V_{CB}=50\text{V}, I_E=0$	-	-	0.1	μA
h_{FE}	DC forward current gain	$V_{CE}=5\text{V}, I_C=10\text{mA}$	50	-	-	-
$V_{CE(sat)}$	Collector to Emitter saturation voltage	$I_C=10\text{mA}, I_B=0.5\text{mA}$	-	0.1	0.3	V
$V_{I(ON)}$	Input on voltage	$V_{CE}=0.2\text{V}, I_C=5\text{mA}$	-	1.5	3.0	V
$V_{I(OFF)}$	Input off voltage	$V_{CE}=5\text{V}, I_C=100\text{ }\mu\text{A}$	0.8	1.1	-	V
R_1	Input resistor	-	7	10	13	$\text{k}\Omega$
R_2/R_1	Resistor ratio	-	0.9	1.0	1.1	-
f_T	Gain band width product	$V_{CE}=6\text{V}, I_E=-10\text{mA}$	-	150	-	MHz

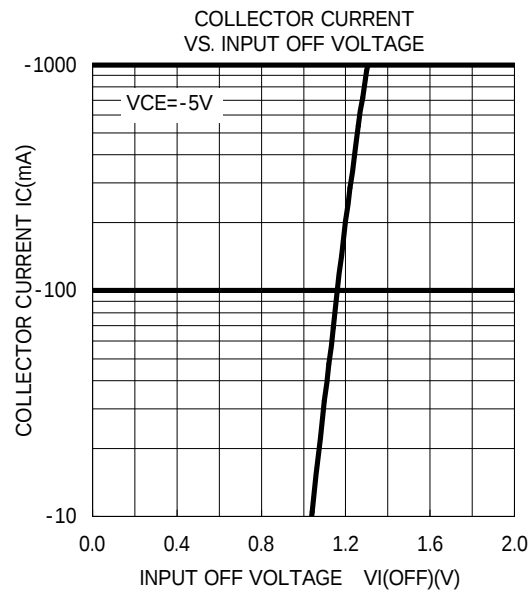
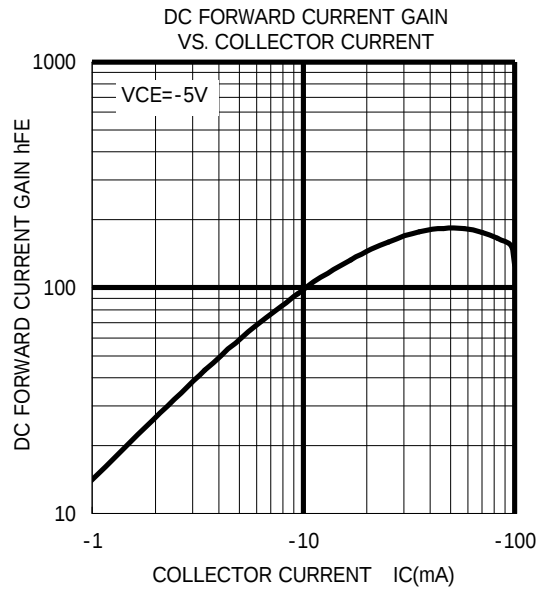
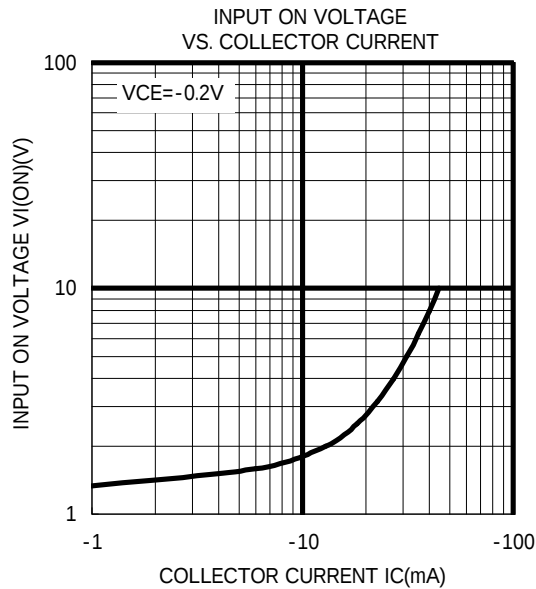
TYPICAL CHARACTERISTICS (Tr1)



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TYPICAL CHARACTERISTICS (Tr2)





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