

RT3T14M

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3T14M is a composite transistor built with RT1N144 chip and RT1P144 chip in SC-88 package.

FEATURE

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

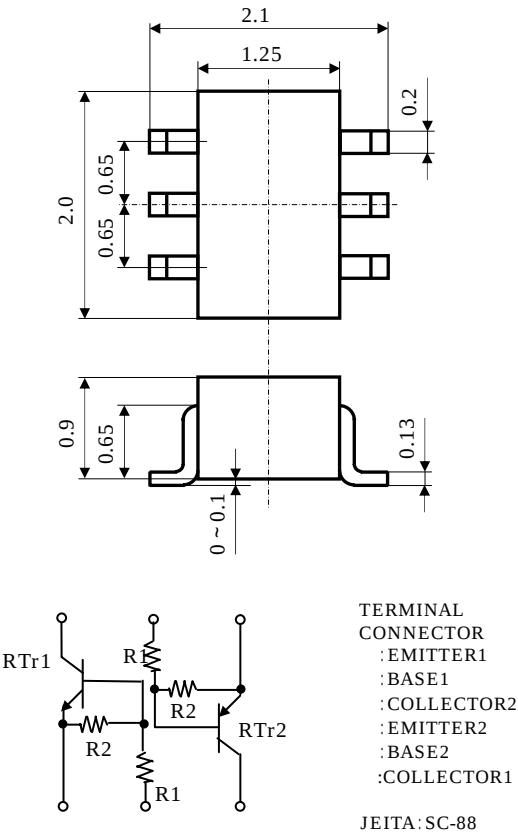
APPLICATION

Inverted circuit, switching circuit,
interface circuit, driver circuit

PNP built in transistor of " - " sign is abbreviation.

OUTLINE DRAWING

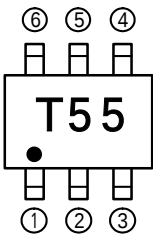
Unit:mm



MAXIMUM RATING (Ta=25)

SYMBOL	PARAMETER	RATING	UNIT
VCBO	Collector to Base voltage	50	V
VEBO	Emitter to Base voltage	6	V
VCEO	Collector to Emitter voltage	50	V
IC	Collector current	100	mA
ICM	Peak Collector current	200	mA
PC	Collector dissipation (Total, Ta=25)	150	mW
Tj	Junction temperature	+ 150	
Tstg	Storage temperature	-55 ~ + 150	

MARKING



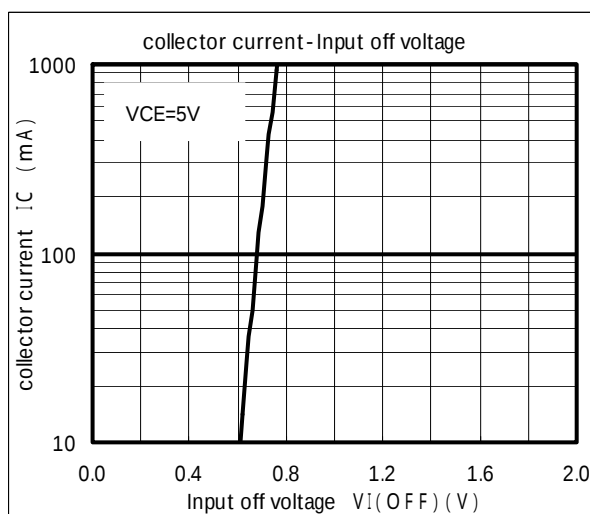
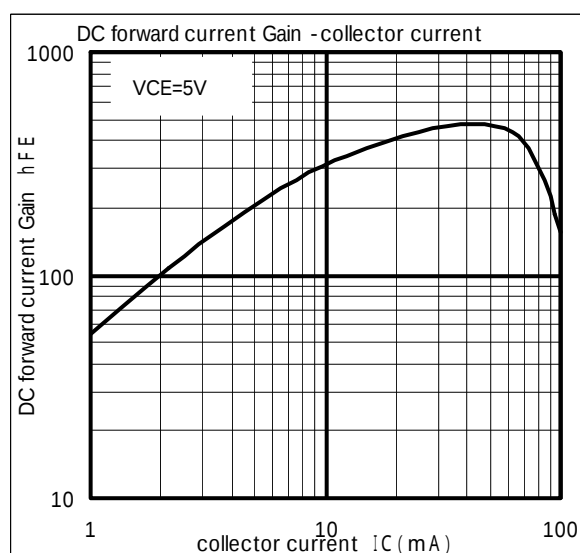
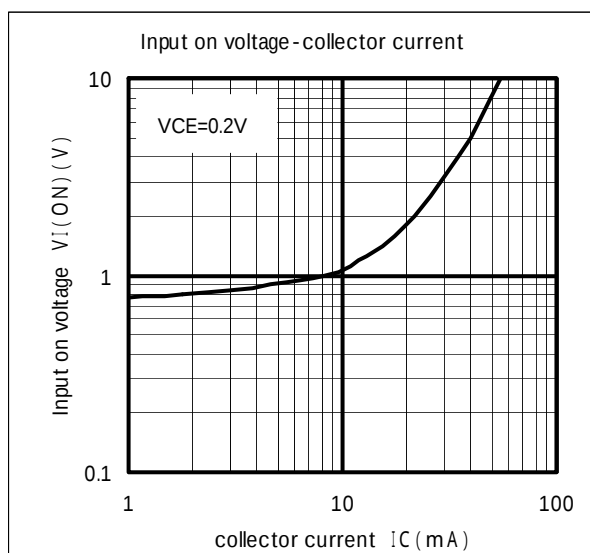
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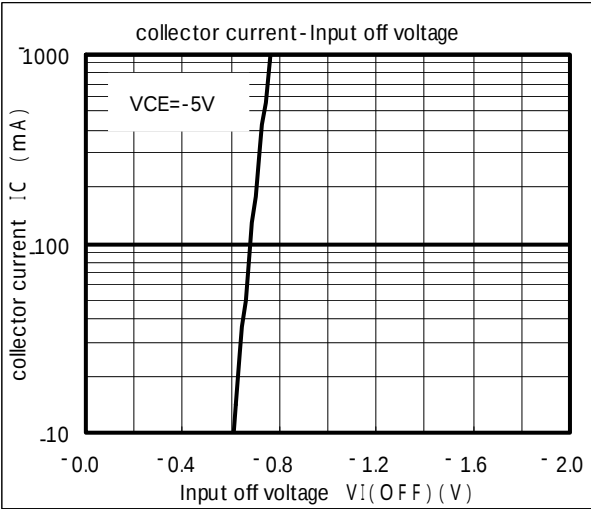
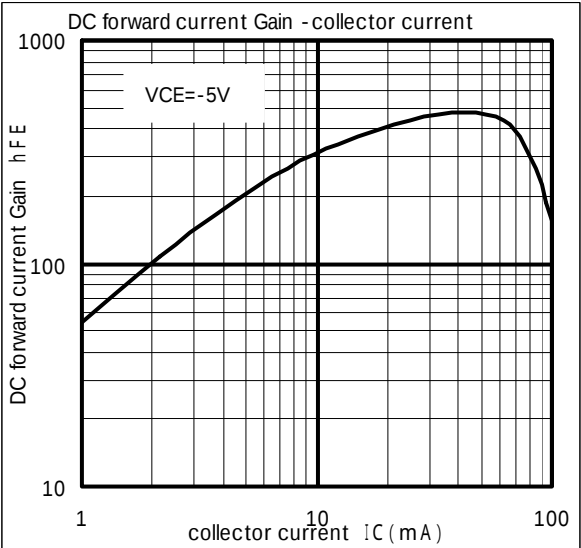
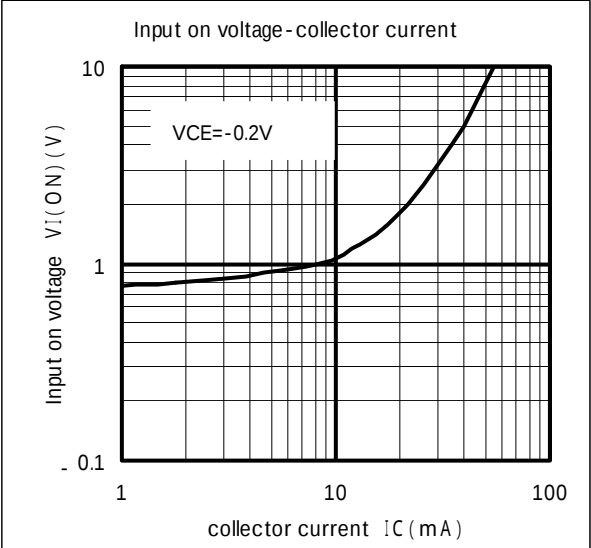
ELECTRICAL CHARACTERISTICS (Ta=25 °C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CEO}$	Collector to Emitter 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	$V_{CE}=5V, I_C=5mA$	50	-	-	-
$V_{CE(sat)}$	Collector to Emitter saturation voltage	$I_C=10mA, I_B=5mA$	-	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	$V_{CE}=5V, I_C=100\mu A$	0.4	0.7	-	V
R_1	Input resistor	-	7	10	13	k Ω
R_2/R_1	Resistor ratio	-	4.2	4.7	5.1	-
f_r	Gain band width product	$V_{CE}=6V, I_E=-10mA$	Tr1	-	200	MHz
			Tr2	-	150	

TYPICAL CHARACTERISTICS (Tr1)



TYPICAL CHARACTERISTICS (T12)





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