

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

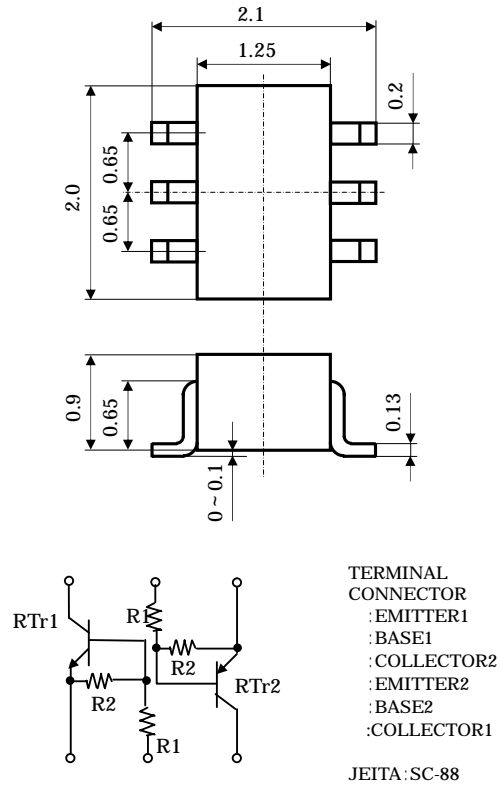
APPLICATION

Inverted circuit, switching circuit,
interface circuit, driver circuit

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

OUTLINE DRAWING

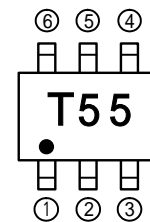
Unit: mm



MAXIMUM RATING (Ta=25 °C)

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 °C)	150	mW
Tj	Junction temperature	+ 150	
Tstg	Storage temperature	-55 ~ + 150	

MARKING



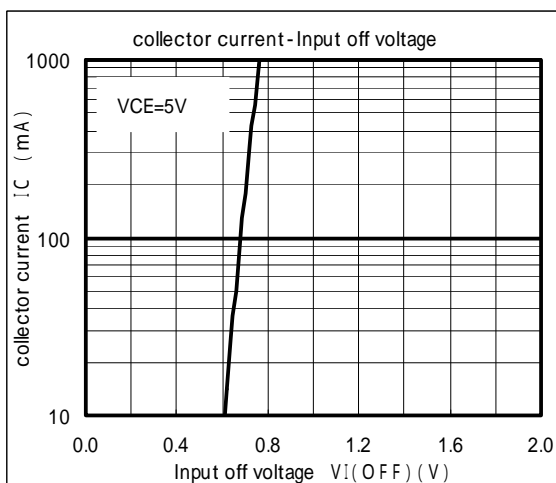
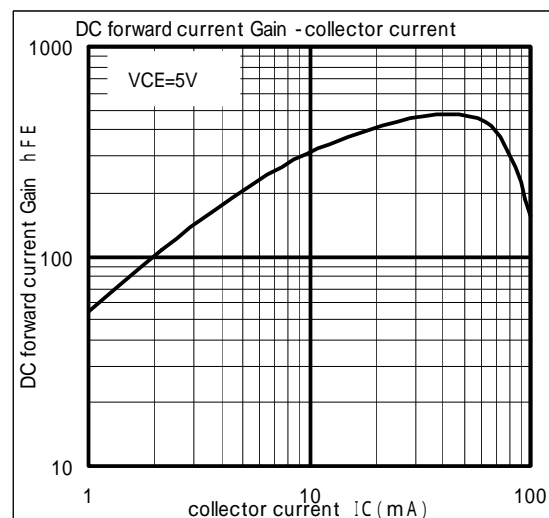
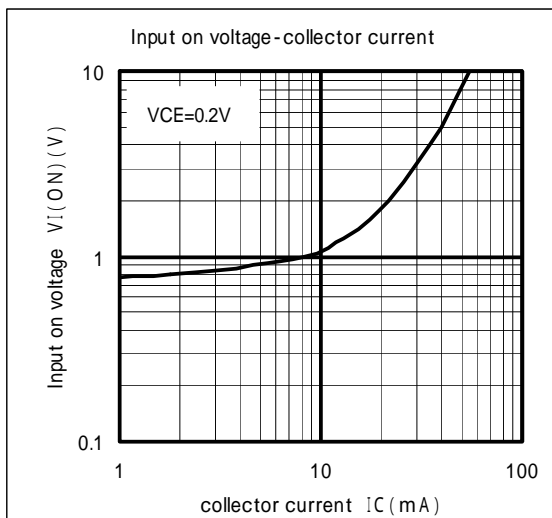
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ELECTRICAL CHARACTERISTICS (Ta=25 °C)

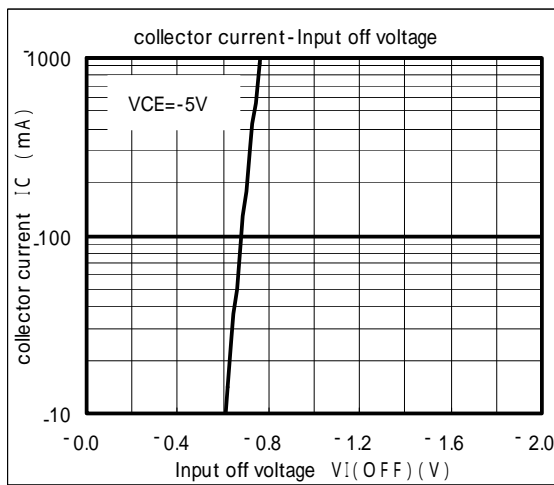
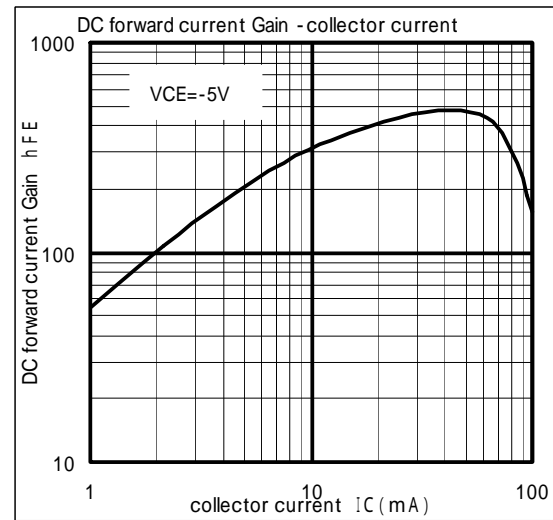
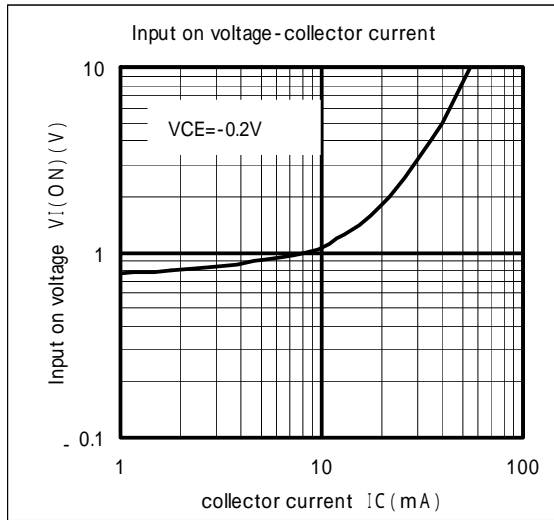
Symbol	Parameter	Test conditions	Limits			Unit	
			Min	Typ	Max		
V _{(BR)CEO}	Collector to Emitter break down voltage	I _C =100 μA, R _{BE} =	50	-	-	V	
I _{CBO}	Collector cut off current	V _{CB} =50V, I _E =0	-	-	0.1	μA	
h _{FE}	DC forward current gain	V _{CE} =5V, I _C =5mA	50	-	-	-	
V _{CE(sat)}	Collector 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 μA	0.4	0.7	-	V	
R ₁	Input resistor	-	7	10	13	k	
R ₂ /R ₁	Resistor ratio	-	4.2	4.7	5.1	-	
f _T	Gain band width product	V _{CE} =6V, I _E =-10mA	Tr1	-	200	-	MHz
			Tr2	-	150	-	

TYPICAL CHARACTERISTICS (Tr1)



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TYPICAL CHARACTERISTICS (Tr2)



ISAHAYA ELECTRONICS CORPORATION



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