

RT3TFFM

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3TFFM is a composite transistor built with RT1N431 chip and RT1P431 chip in SC-88 package.

FEATURE

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

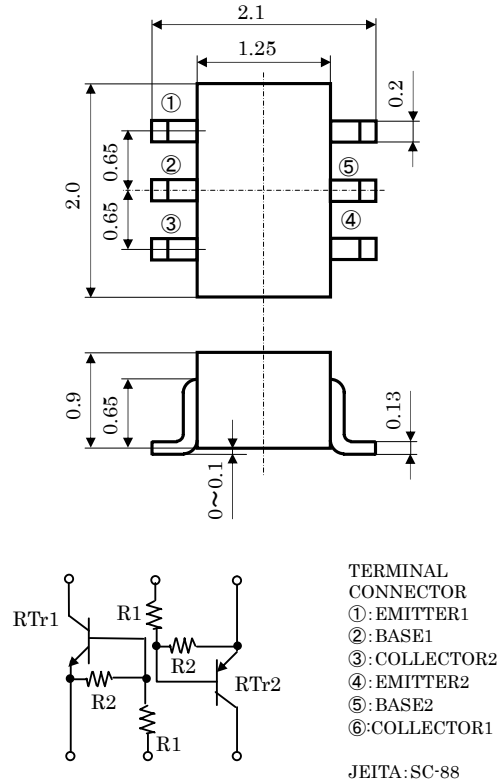
APPLICATION

Inverted circuit, switching circuit,
interface circuit, driver circuit

※PNP built in transistor of "–" sign is abbreviation.

OUTLINE DRAWING

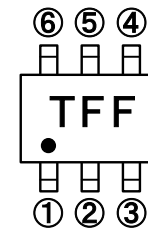
Unit: mm



MAXIMUM RATING (Ta=25°C) (The characteristics apply to both Tr1 and Tr2.)

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
V _{IN}	Input voltage	30	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



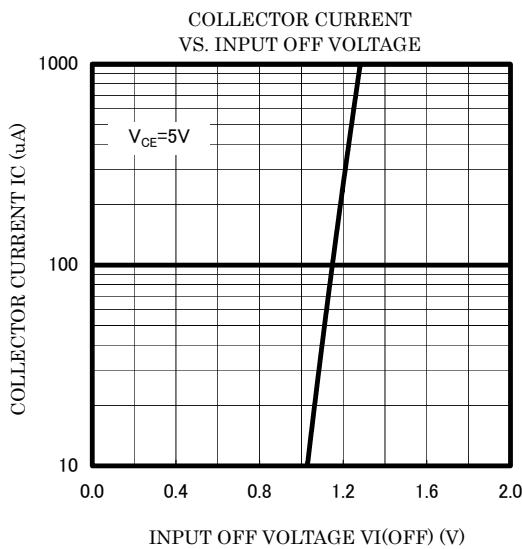
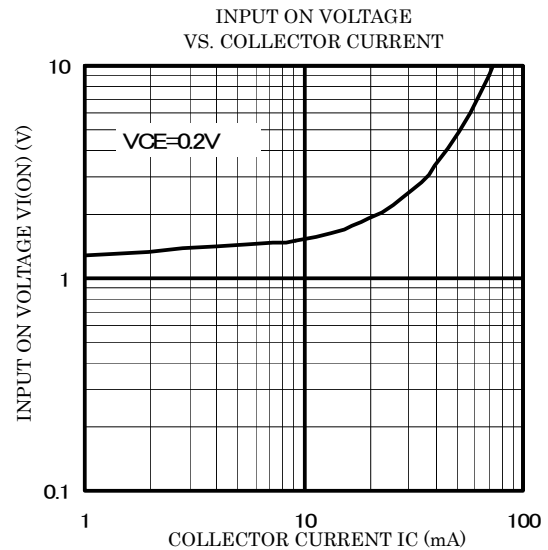
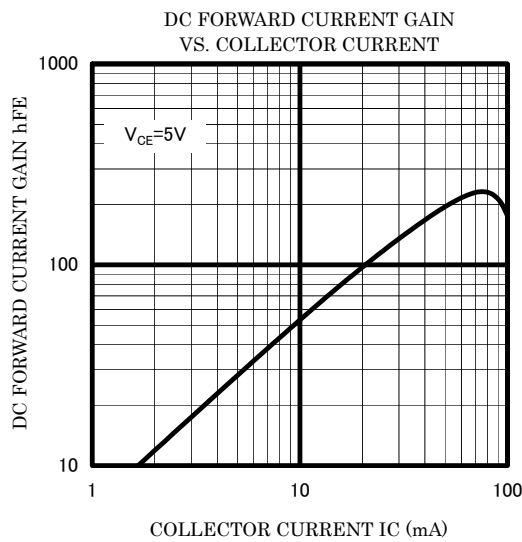
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ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit	
			Min	Typ	Max		
V _{(BR)CEO}	Collector to Emitter break down voltage	I _C =100μ A, R _{BE} =	50	-	-	V	
I _{CBO}	Collector cut off current	V _{CB} =50V, I _E =0	-	-	0.1	μ A	
h _{FE}	DC forward current gain	V _{CE} =5V, I _C =10mA	20	-	-	-	
V _{CE(sat)}	Collector to Emitter saturation voltage	I _C =10mA, I _B =0.5mA	-	-	0.3	V	
V _{I(ON)}	Input on voltage	V _{CE} =0.2V, I _C =5mA	-	1.4	2.3	V	
V _{I(OFF)}	Input off voltage	V _{CE} =5V, I _C =100μ A	0.8	1.1	-	V	
R ₁	Input resistor	-	3.3	4.7	6.1	k	
R ₂ /R ₁	Resistor ratio	-	0.8	1.0	1.2	-	
f _T	Gain band width product	V _{CE} =6V, I _E =10mA	R _T 1	-	200	-	MHz
			R _T 2	-	150	-	

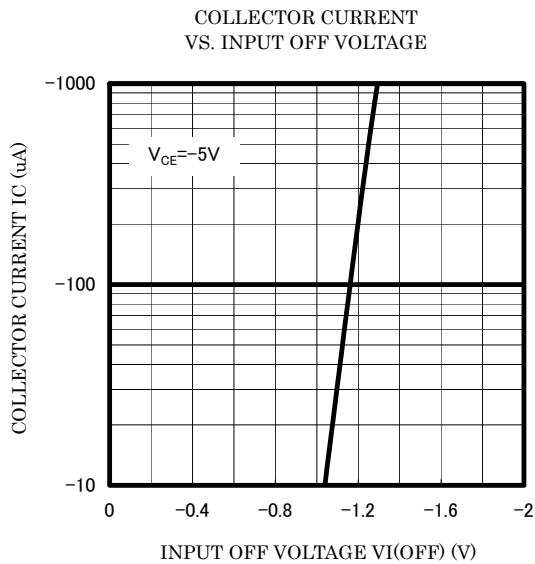
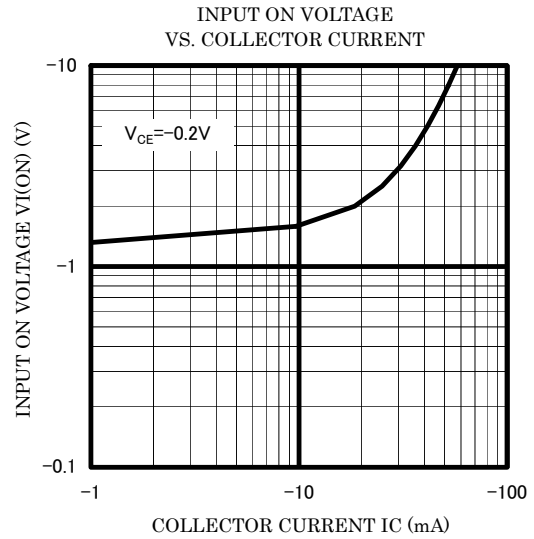
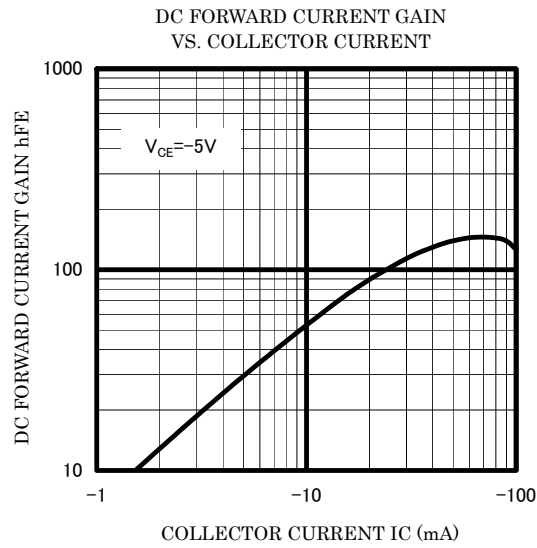
TYPICAL CHARACTERISTICS (R_T1)



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TYPICAL CHARACTERISTICS (RT_{r2})





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