

RT3TFFM-T150

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

AEC-Q101 Compliance

DESCRIPTION

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

FEATURE

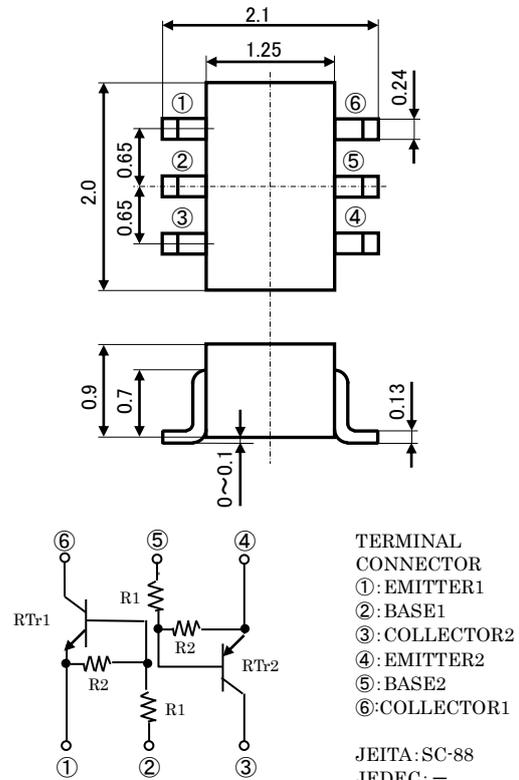
- Silicon epitaxial type
- Each transistor elements are independent.
- Mini package for easy mounting

APPLICATION

- Inverted circuit, Switching circuit,
- Interface circuit, Driver circuit

OUTLINE DRAWING

Unit:mm

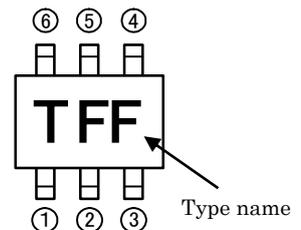


MAXIMUM RATING (Ta=25°C) (RTr1_NPN, RTr2_PNP)

SYMBOL	PARAMETER	RATING	UNIT
VCBO	Collector to Base voltage	50	V
VEBO	Emitter to Base voltage	10	V
VCEO	Collector to Emitter voltage	50	V
VIN	Input voltage	30	V
IC	Collector current	100	mA
ICM	Peak Collector current	200	mA
PT	Total dissipation	200	mW
Tj	Junction temperature	+150	°C
Tstg	Storage temperature	-55~+150	°C

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

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25°C) (RTr1_NPN, RTr2_PNP)

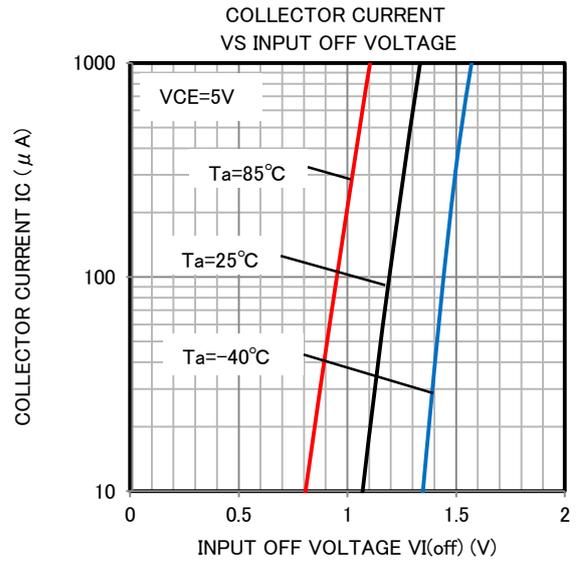
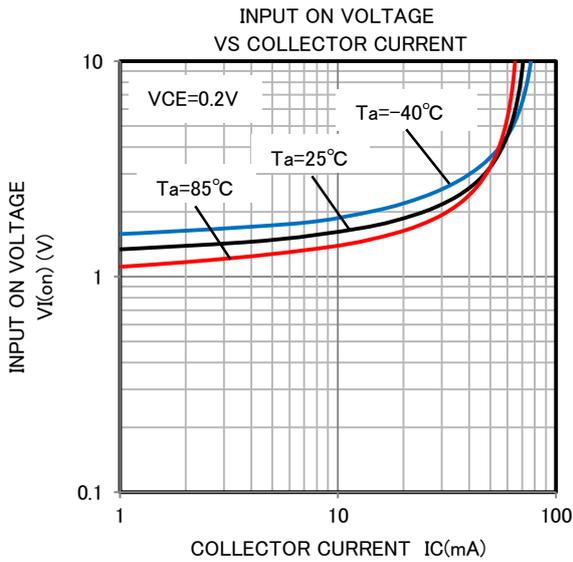
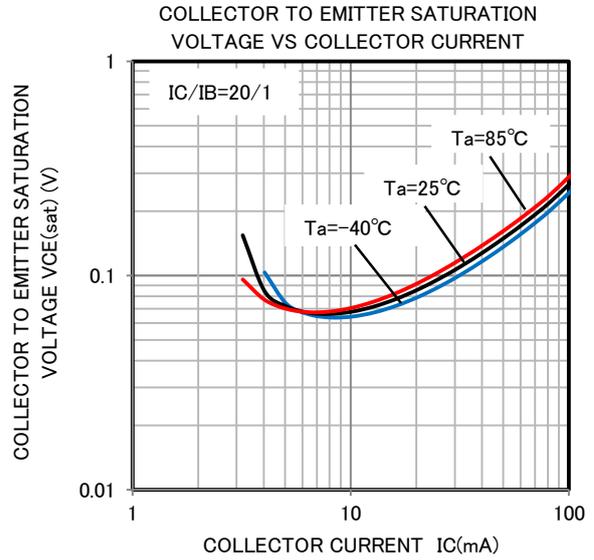
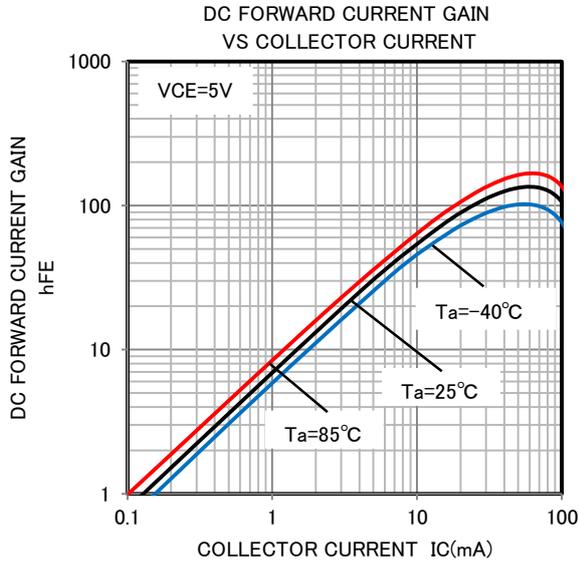
Symbol	Parameter	Test conditions	Limits			Unit	
			Min	Typ	Max		
V(BR)CEO	Collector to Emitter breakdown voltage	IC=100μA, RBE=∞	50	—	—	V	
ICBO	Collector cut off current	VCB=50V, IE=0	—	—	0.1	μA	
IEBO	Emitter cut off current	VEB=5V, IC=0	399	532	771	μA	
hFE	DC forward current gain	VCE=5V, IC=10mA	20	—	—	—	
VCE(sat)	Collector to Emitter saturation voltage	IC=10mA, IB=0.5mA	—	—	0.3	V	
VI(ON)	Input on voltage	VCE=0.2V, IC=5mA	—	1.4	2.3	V	
VI(OFF)	Input off voltage	VCE=5V, IC=100μA	0.8	1.1	—	V	
R1	Input resistor	—	3.3	4.7	6.1	kΩ	
R2/R1	Resistor ratio	—	0.8	1.0	1.2	—	
fT	Gain band width product	VCE=6V, IE=10mA	RTr1	—	200	—	MHz
			RTr2	—	150	—	

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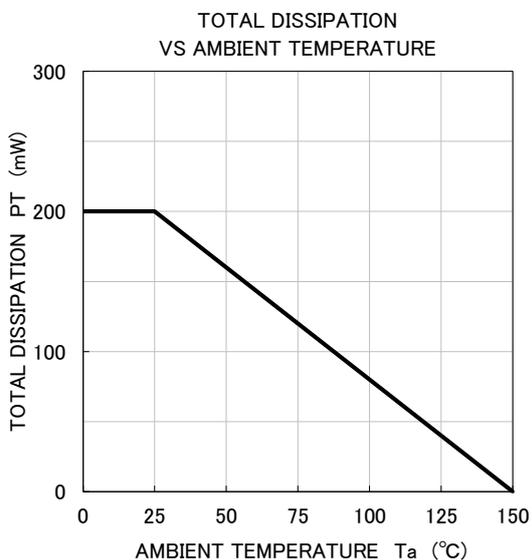
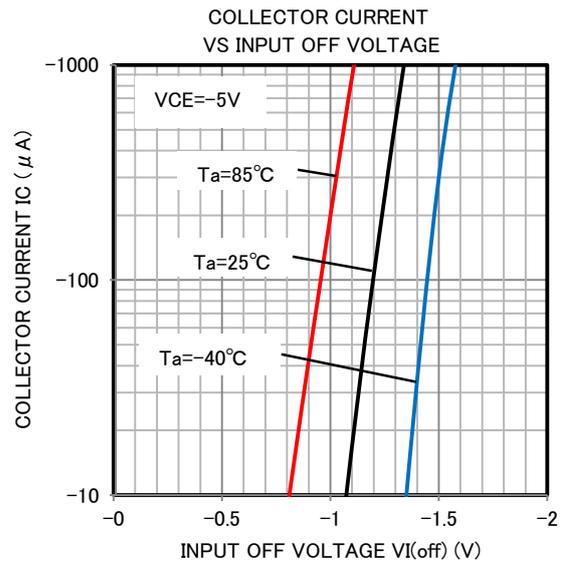
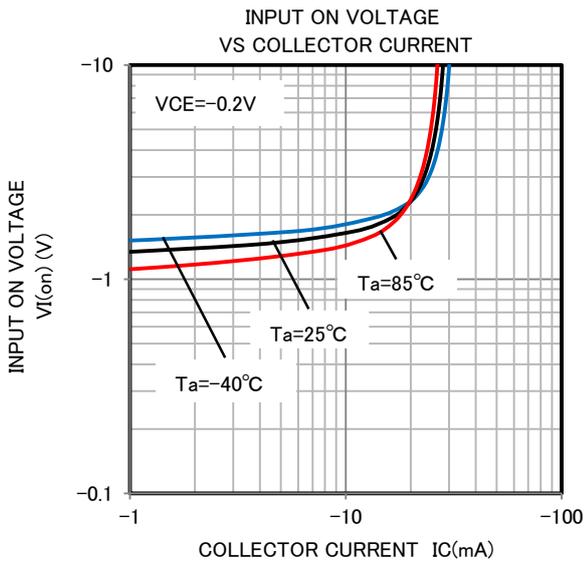
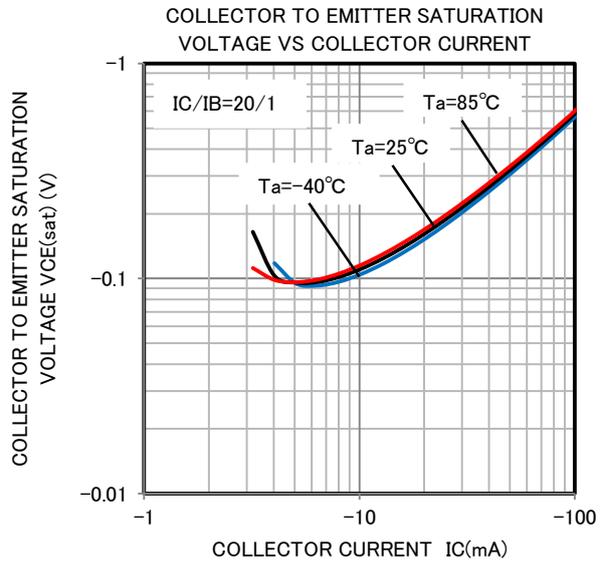
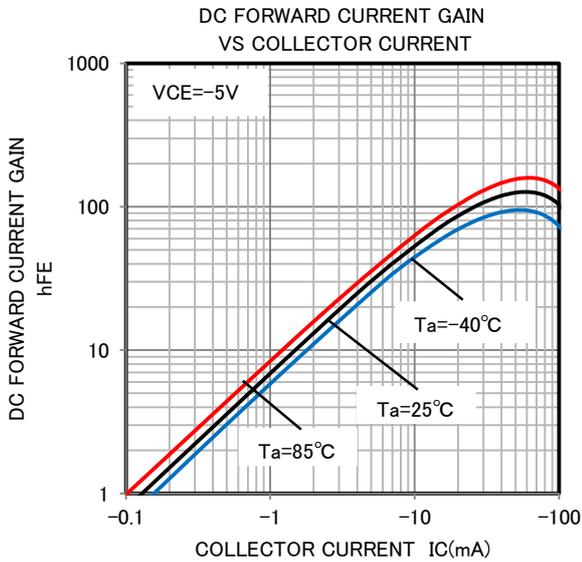
TYPICAL CHARACTERISTICS (RT_r1_NPN)



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TYPICAL CHARACTERISTICS (RT_r 2_PNP)



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