RT3TGGM

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3TGGM is composite transistor built with RT1N432 chip and RT1P432 chip in SC-88 package.

FEATURE

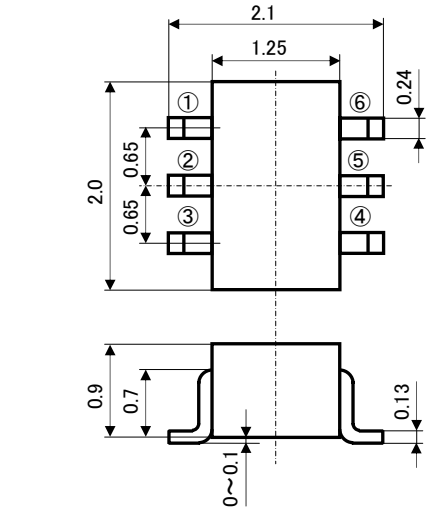
Silicon epitaxial type
Each transistor elements are independent.
Mini package for easy mounting

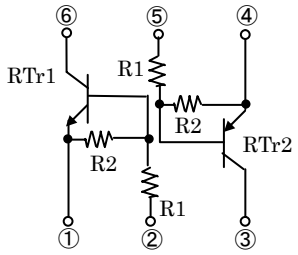
APPLICATION

Inverted circuit, Switching circuit,
Interface circuit, Driver circuit

OUTLINE DRAWING

Unit:mm





TERMINAL CONNECTOR
①:EMITTER1
②:BASE1
③:COLLECTOR2
④:EMITTER2
⑤:BASE2
⑥:COLLECTOR1

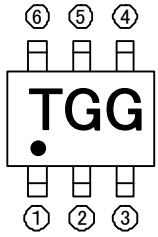
JEITA:SC-88
JEDEC:－

MAXIMUM RATING (Ta=25℃) (RTr1_NPN, RTr2_PNP)

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	50	V
V_{EBO}	Emitter to Base voltage	7	V
V_{CEO}	Collector to Emitter voltage	50	V
V_{IN}	Input voltage	20	V
I_C	Collector current	100	mA
I_{CM}	Peak Collector current	200	mA
P_C	Collector dissipation(Total)	150	mW
T_j	Junction temperature	+150	℃
T_{stg}	Storage temperature	-55～+150	℃

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

MARKING

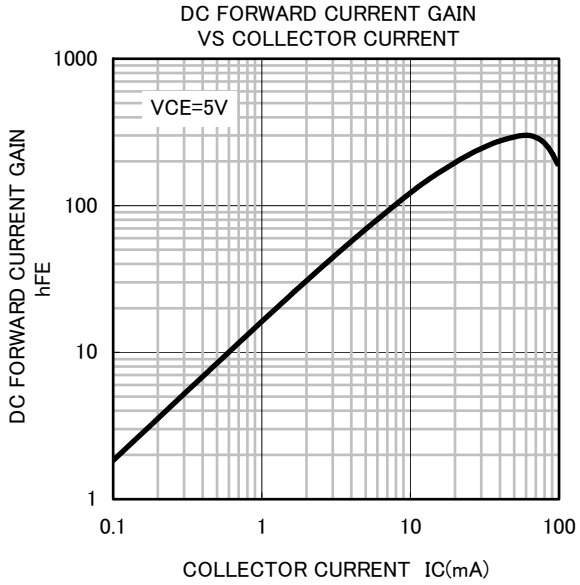


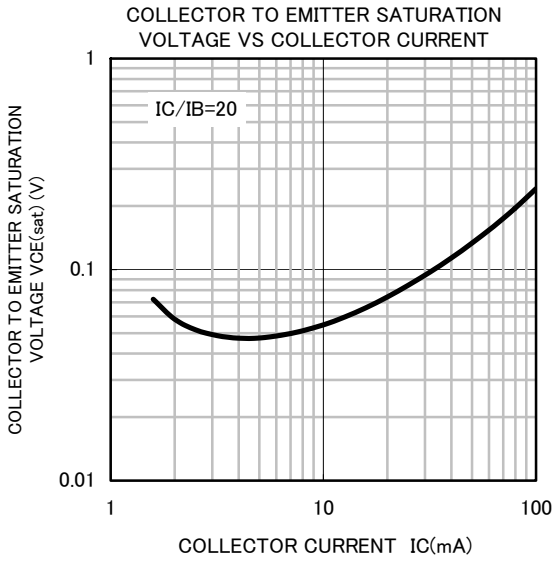
ELECTRICAL CHARACTERISTICS (Ta=25℃) (RTr1_NPN, RTr2_PNP)

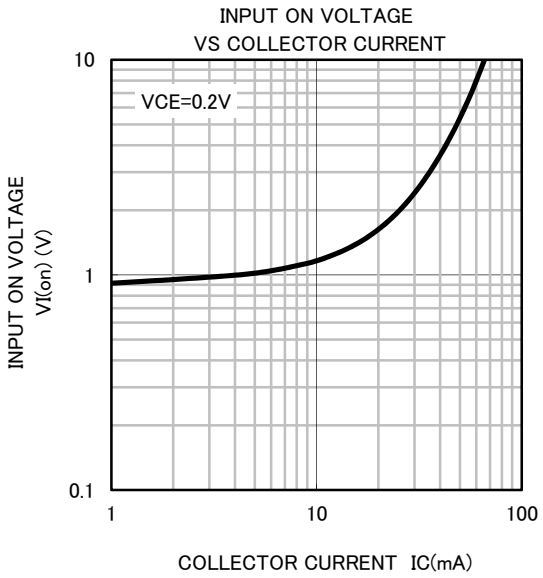
Symbol	Parameter	Test conditions		Limits			Unit
				Min		Max	
$V_{(BR)CEO}$	Collector to Emitter break down voltage	I_C=100μA,R_{BE}=∞		50	－	－	V
I_{CBO}	Collector cut off current	V_{CB}=50V,I_E=0		－	－	0.1	μA
I_{EBO}	Emitter cut off current	V_{EB}=5V,I_C=0		255	340	493	μA
h_{FE}	DC forward current gain	V_{CE}=5V,I_C=10mA		30	－	－	－
$V_{CE(sat)}$	Collector to Emitter saturation voltage	I_C=10mA,I_B=0. 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=100μA		0.5	0.8	－	V
R_1	Input resistor	－		3.3	4.7	6.1	kΩ
R_2/R_1	Resistor ratio	－		1.7	2.1	2.6	－
f_T	Gain band width product	V_{CE}=6V,I_E=10mA	RTr1	－	200	－	MHz
			RTr2	－	150	－	

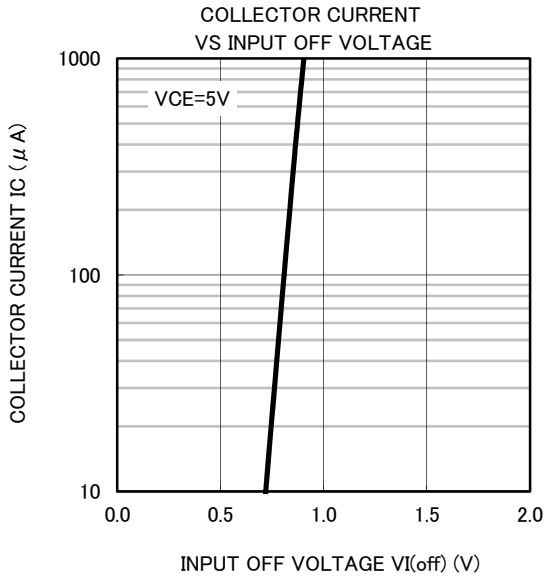
※PNP built in transistor of"－"sign is abbreviation.

TYPICAL CHARACTERISTICS (RTr1_NPN)



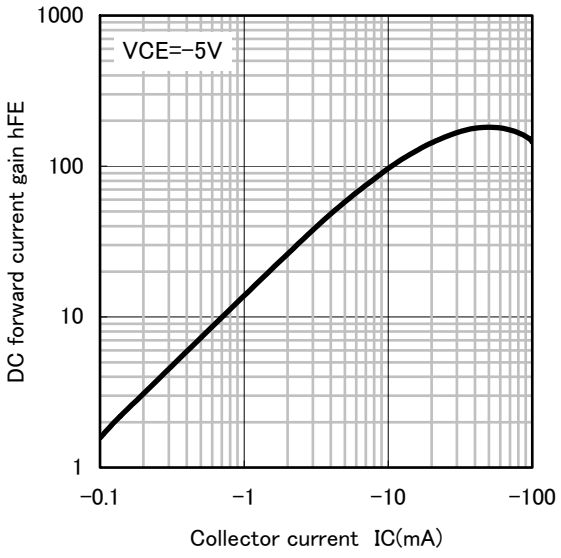




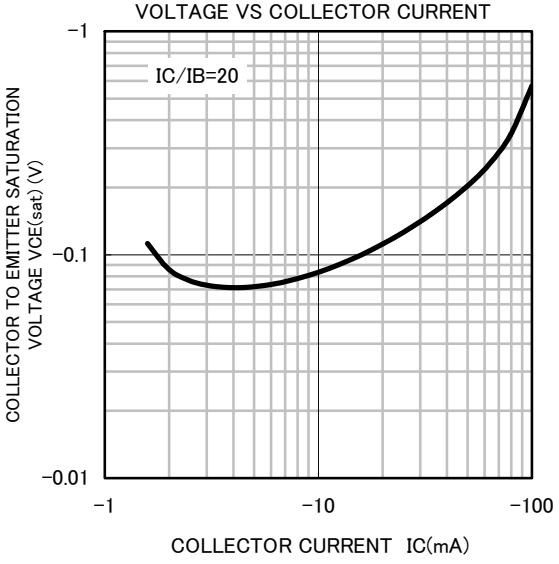


TYPICAL CHARACTERISTICS (RTr 2_PNP)

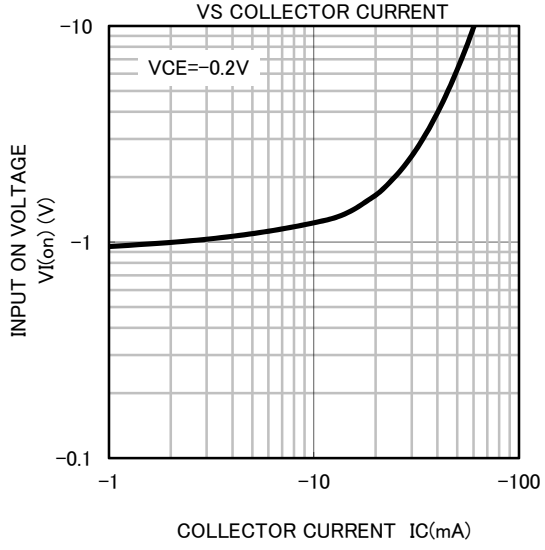
DC forward current gain–Collector current



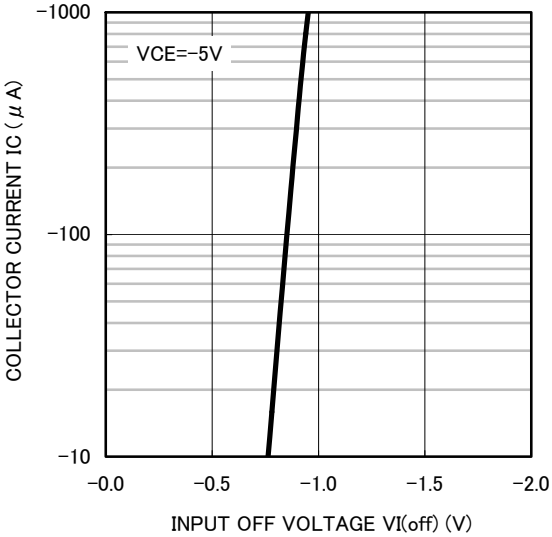
COLLECTOR TO EMITTER SATURATION VOLTAGE VS COLLECTOR CURRENT



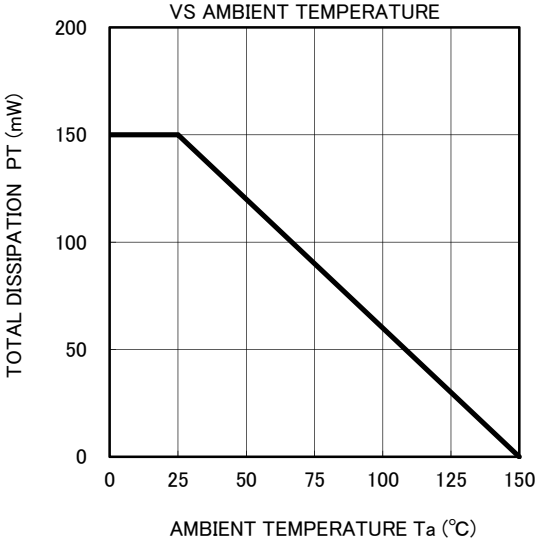
INPUT ON VOLTAGE VS COLLECTOR CURRENT



COLLECTOR CURRENT VS INPUT OFF VOLTAGE



TOTAL DISSIPATION VS AMBIENT TEMPERATURE



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