RT3T77M

Composite Transistor With Resistor
For Switching Application
Silicon Epitaxial Type

DESCRIPTION

RT3T77M is composite transistor built with RT1N140 chip and RT1P140 chip in SC-88 package.

FEATURE

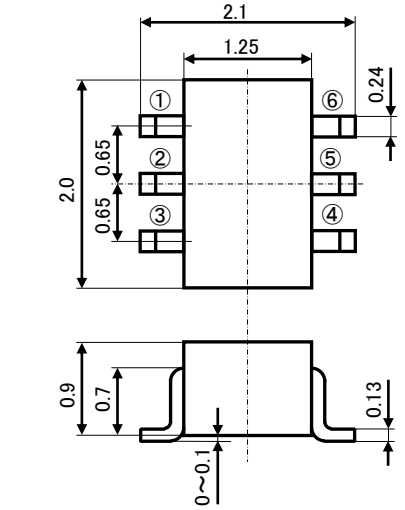
Built-in bias resistor (R1=10kΩ)
Mini package for easy mounting

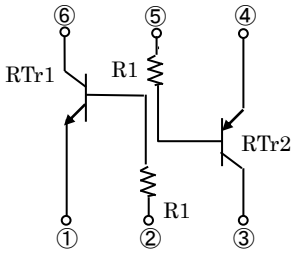
APPLICATION

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

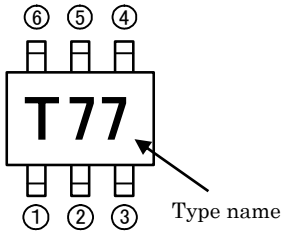
JEITA:SC-88
JEDEC:－

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	6	V
V_{CEO}	Collector to Emitter voltage	50	V
I_C	Collector current	100	mA
I_{CM}	Peak Collector current	200	mA
P_T	Total dissipation	200	mW
T_j	Junction temperature	＋150	℃
T_{stg}	Storage temperature	-55～＋150	℃

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

MARKING

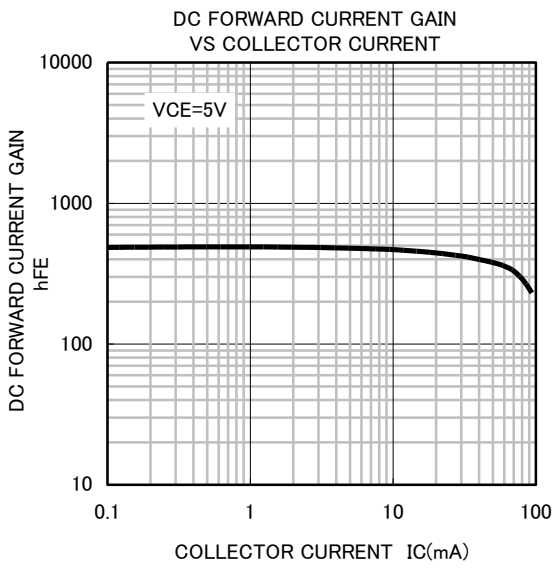


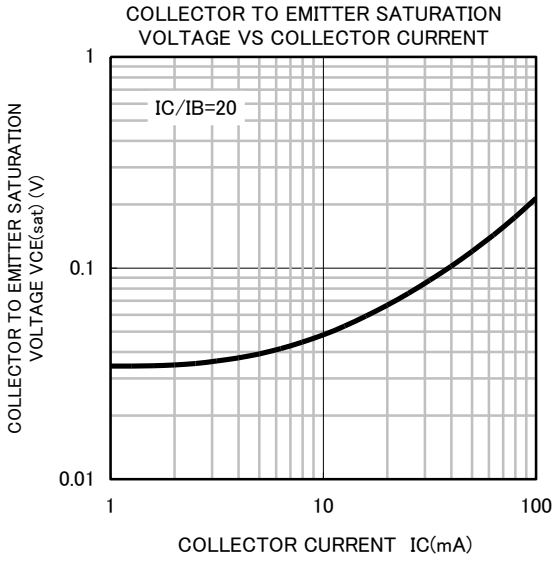
ELECTRICAL CHARACTERISTICS (Ta=25℃) (RTr1_NPN, RTr2_PNP)

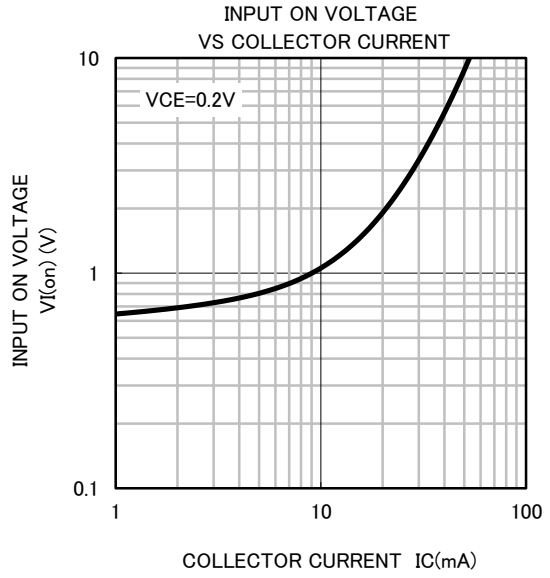
Symbol	Parameter	Test conditions		Limits			Unit
				Min	Typ	Max	
$V_{(BR)CEO}$	Collector to Emitter breakdown voltage	I_C=100μA, R_{BE}=∞		50	－	－	V
I_{CBO}	Collector cut off current	V_{CB}=50V, I_E=0		－	－	0.1	μA
I_{EBO}	Emitter cut off current	V_{EB}=5V, I_C=0		－	－	0.1	μA
h_{FE}	DC forward current gain	V_{CE}=5V, I_C=1mA		100	－	－	－
$V_{CE(sat)}$	Collector to Emitter saturation voltage	I_C=10mA, I_B=0.5mA		－	0.1	0.3	V
R_1	Input resistor	－		7	10	13	kΩ
f_T	Gain band width product	V_{CE}=6V, I_E=10mA	RTr1	－	200	－	MHz
			RTr2	－	150	－	

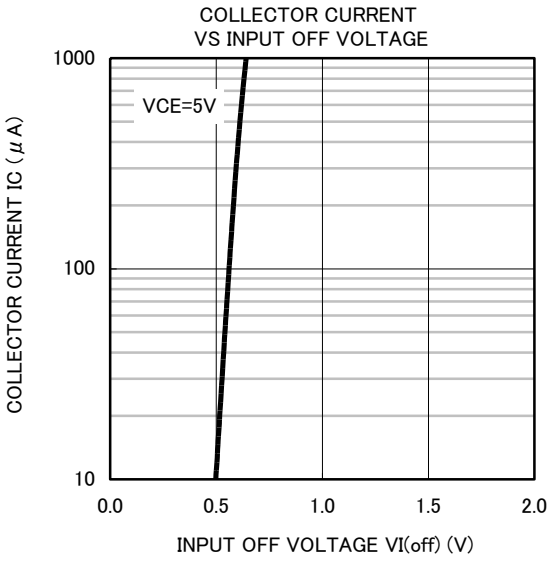
※PNP built in transistor of"－"sign is abbreviation.

TYPICAL CHARACTERISTICS(Ta=25℃)(RTr1_NPN)

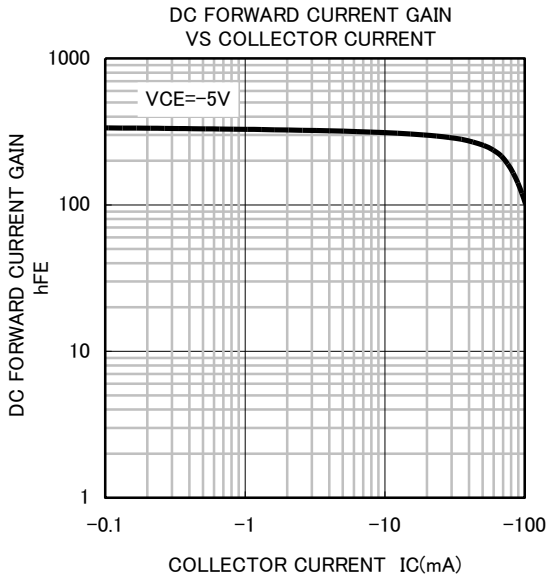


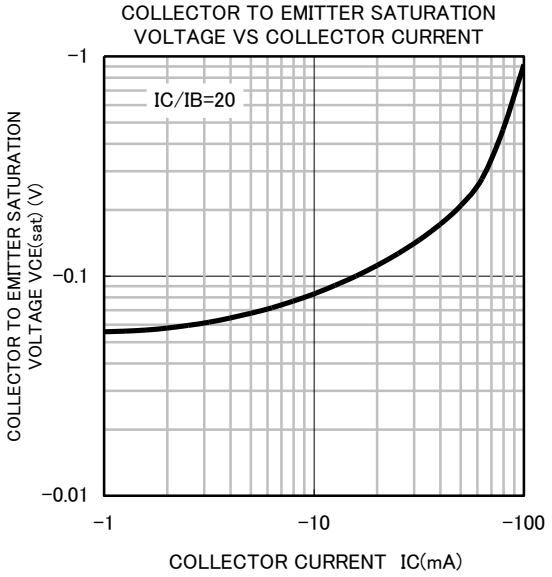


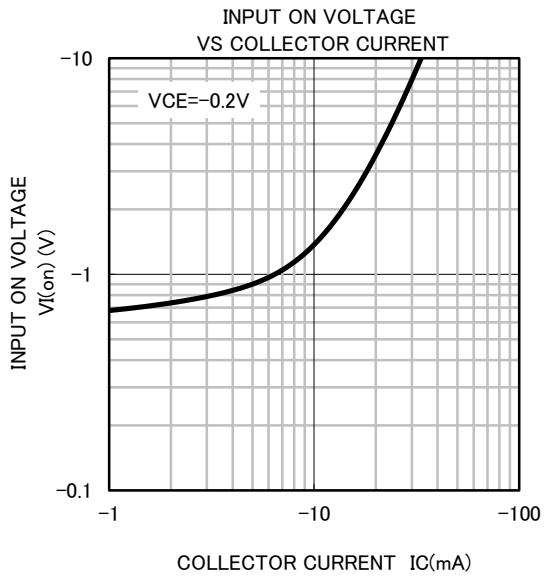


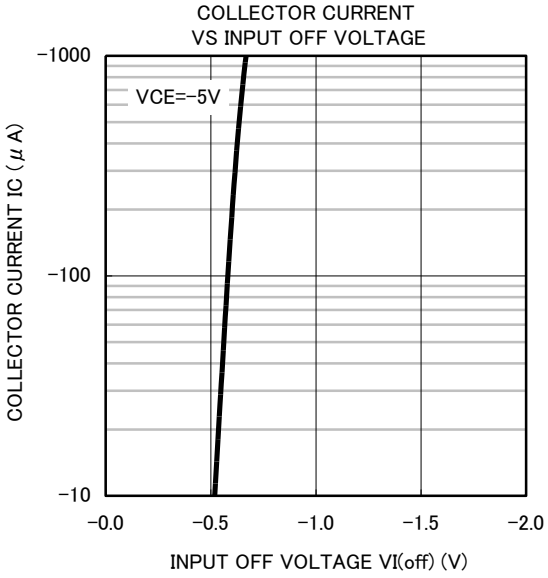


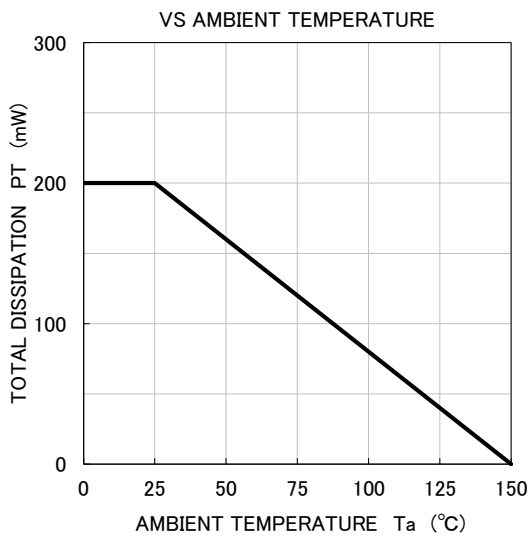
TYPICAL CHARACTERISTICS(Ta=25℃)(RTr 2_PNP)











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