# RT3TTTM

Composite Transistor With Resistor For Switching Application Silicon Epitaxial Type

### DESCRIPTION

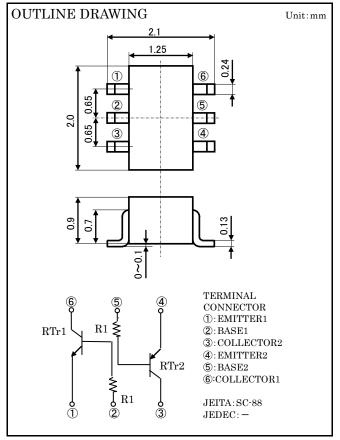
RT3TTTM is composite transistor built with RT1N250 chip and RT1P250 chip in SC-88 package.

#### FEATURE

Built-in bias resistor (R1=200kΩ) Mini package for easy mounting

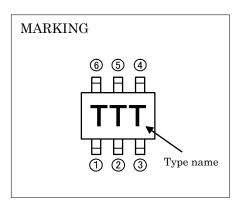
#### APPLICATION

Inverted circuit, Switching circuit, Interface circuit, Driver circuit



#### 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	6	V			
VCEO	Collector to Emitter voltage	50	V			
IC	Collector current	100	mA			
ICM	Peak Collector current	200	mA			
Рт	Total dissipation	200	mW			
Tj	Junction temperature	+150	°C			
Tstg	Storage temperature	-55~+150	°C			
<b>XPNP</b> built in transistor of "-"sign is abbreviation.						



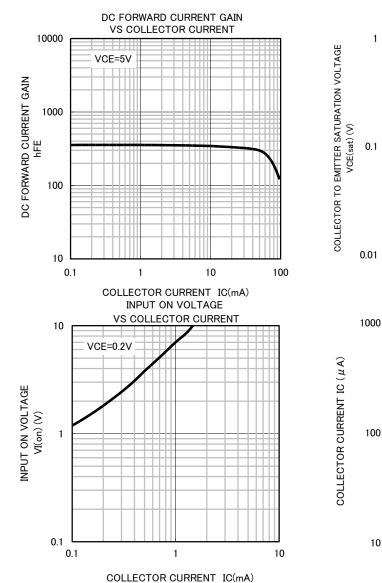
#### ELECTRICAL CHARACTERISTICS (Ta=25°C) (RTr1\_NPN, RTr2\_PNP)

0 1 1	Parameter	Test conditions		Limits			TT :
Symbol				Min	Тур	Max	Unit
V(BR)CEO	Collector to Emitter breakdown voltage	$I_{C}=100 \mu$ A, $R_{BE}=\infty$		50	_	—	V
ICBO	Collector cut off current	V <sub>CB</sub> =50V, I <sub>E</sub> =0		-	-	0.1	μA
IEBO	Emitter cut off current	$V_{EB}$ =5V, $I_C$ =0		-	_	0.1	μA
hfe	DC forward current gain V <sub>CE</sub> =5V, Ic=1mA		100	-	—	—	
VCE(sat)	Collector to Emitter saturation voltage Ic=0.5mA, IB=0.05mA		-	_	0.3	V	
R1	Input resistor	_		140	200	260	kΩ
fT	Gain band width product	VCE=6V, IE=10mA	RTr1	1	200	—	MIL
			RTr2	_	150	_	MHz

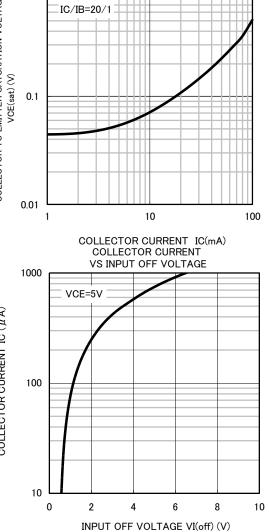
PNP built in transistor of "-"sign is abbreviation.

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#### TYPICAL CHARACTERISTICS(Ta=25°C)(RTr1\_NPN)

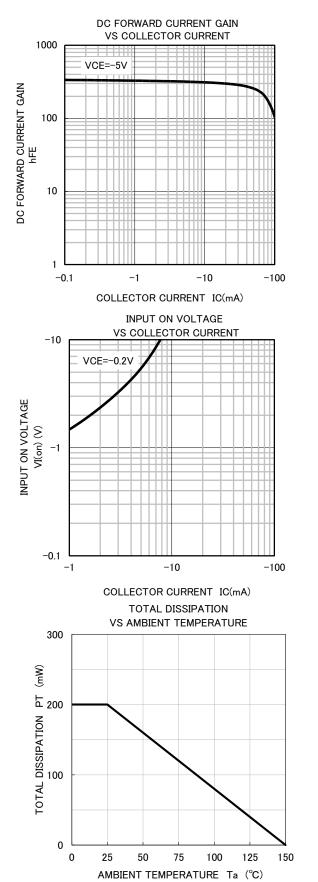


COLLECTOR TO EMITTER SATURATION

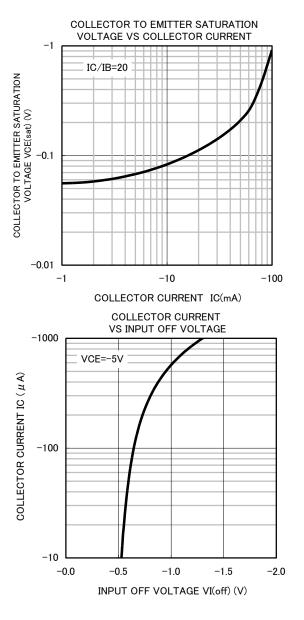
VOLTAGE VS COLLECTOR CURRENT

## RT3TTTM

Composite Transistor With Resistor For Switching Application Silicon Epitaxial Type



#### TYPICAL CHARACTERISTICS(Ta=25°C)(RTr 2\_PNP)



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