

# RT3NLLM

Composite Transistor With Resistor  
For Switching Application  
Silicon Epitaxial Type

## DESCRIPTION

RT3NLLM is composite transistor built with two RT1N230 chips in SC-88 package.

## FEATURE

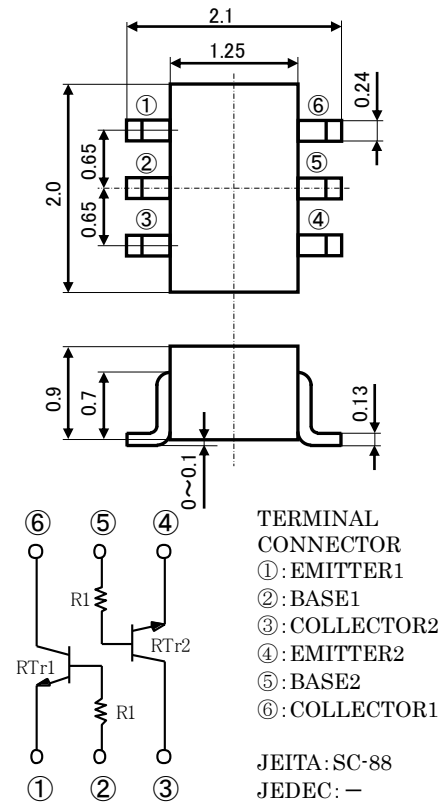
Built-in bias resistor ( $R_1=2.2k\Omega$ )  
Mini package for easy mounting

## APPLICATION

Inverted circuit, Switching circuit,  
Interface circuit, Driver circuit

## OUTLINE DRAWING

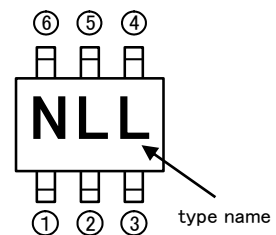
Unit:mm



## MAXIMUM RATING( $T_a=25^\circ\text{C}$ )(RT<sub>r1</sub>, RT<sub>r2</sub> COMMON)

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
I <sub>C</sub>	Collector current	100	mA
I <sub>CM</sub>	Peak Collector current	200	mA
P <sub>T</sub>	Total dissipation	200	mW
T <sub>j</sub>	Junction temperature	+150	°C
T <sub>stg</sub>	Storage temperature	-55~+150	°C

## MARKING



## ELECTRICAL CHARACTERISTICS( $T_a=25^\circ\text{C}$ )(RT<sub>r1</sub>, RT<sub>r2</sub> COMMON)

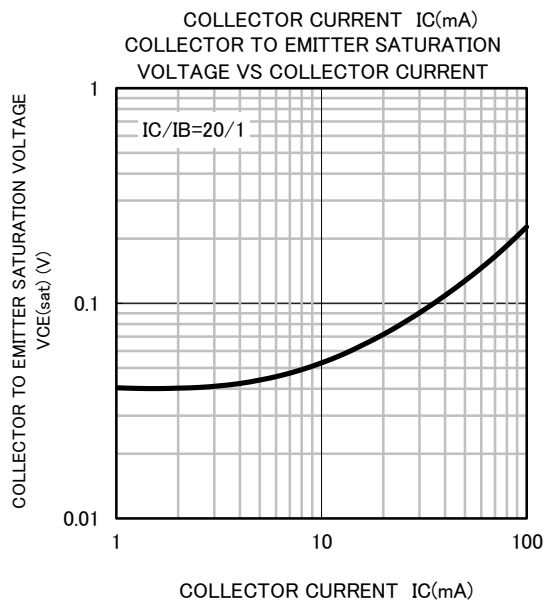
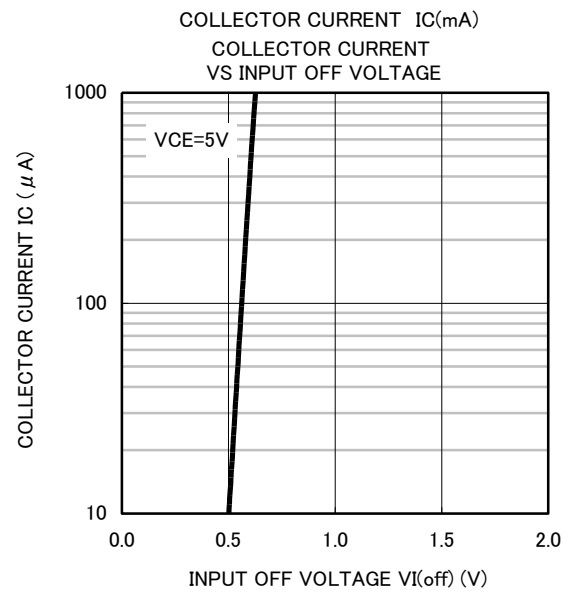
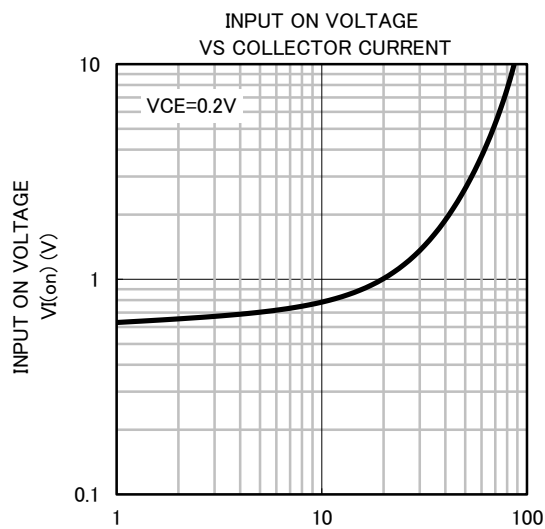
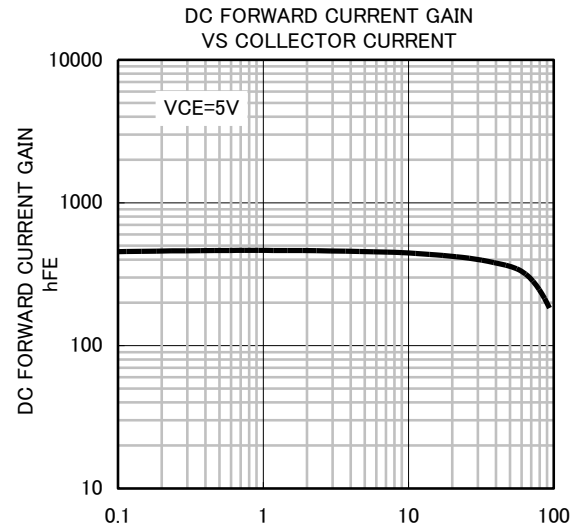
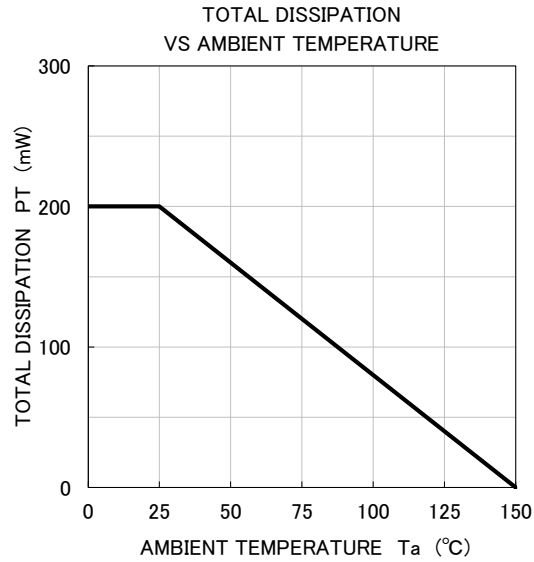
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
V <sub>(BR)CEO</sub>	Collector to Emitter breakdown voltage	I <sub>C</sub> =100 μA, R <sub>BE</sub> =∞	50	-	-	V
I <sub>CBO</sub>	Collector cut off current	V <sub>CB</sub> =50V, I <sub>E</sub> =0	-	-	0.1	μA
I <sub>EBO</sub>	Emitter cut off current	V <sub>EB</sub> =5V, I <sub>C</sub> =0	-	-	0.1	μA
h <sub>FE</sub>	DC forward current gain	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA	100	-	-	-
V <sub>CE(sat)</sub>	Collector to Emitter saturation voltage	I <sub>C</sub> =10mA, I <sub>B</sub> =0.5mA	-	-	0.3	V
R <sub>1</sub>	Input resistor	-	1.5	2.2	2.9	kΩ
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =6V, I <sub>E</sub> =-10mA	-	200	-	MHz

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## TYPICAL CHARACTERISTICS

( $T_a=25^\circ\text{C}$ )( $R_{Tr1}, R_{Tr2}$  COMMON)



COLLECTOR CURRENT  $I_C$  (mA)

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