

RT2N03M

COMPOUND TRANSISTOR WITH RESISTOR
FOR SWITCHING APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

RT2N03M is a compound transistor with built-in bias resistor

FEATURE

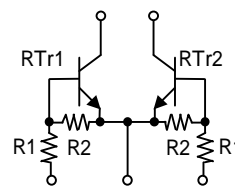
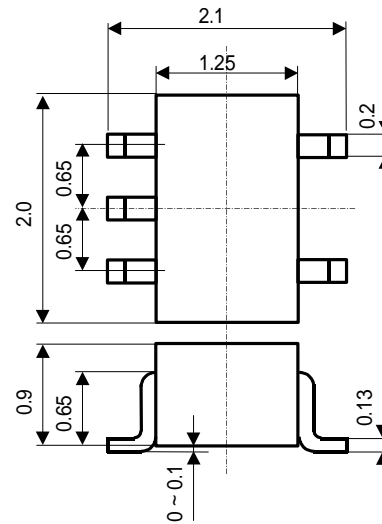
- Built-in bias resistor (R1=10K , R2=10K)
- Mini package for easy mounting

APPLICATION

Inverted circuit , switching circuit , interface circuit , driver circuit

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTOR

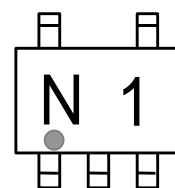
- : BASE 1
- : EMITTER (COMMON)
- : BASE 2
- : COLLECTOR 2
- : COLLECTOR 1

JEITA: SC-88A
JEDEC: -

MAXIMUM RATINGS (Ta=25)(RTr1, RTr2)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	50	V
V_{EBO}	Emitter to Base voltage	10	V
V_{CEO}	Collector to Emitter voltage	50	V
I_C	Collector current	100	mA
I_{CM}	Peak Collector current	200	mA
P_C	Collector dissipation (Total Ta=25)	150	mW
T_j	Junction temperature	+ 150	
T_{stg}	Storage temperature	-55 ~ + 150	

MARKING

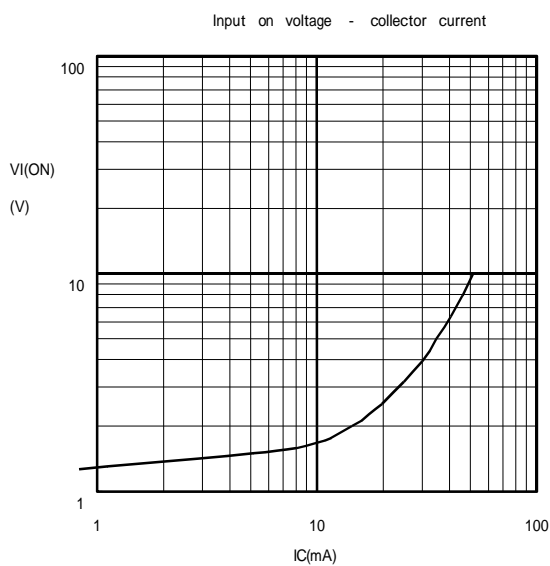
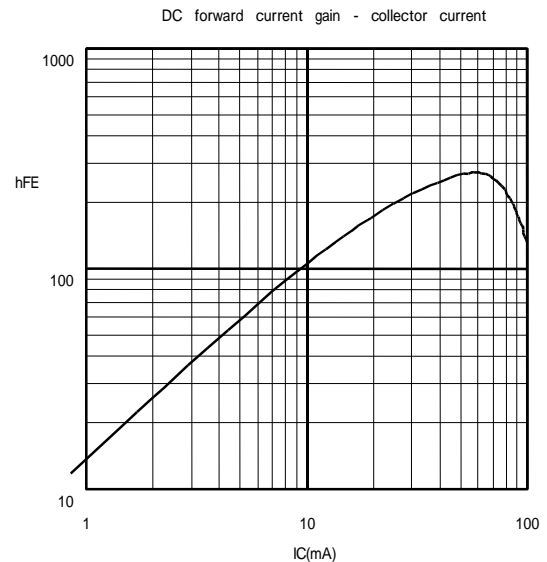
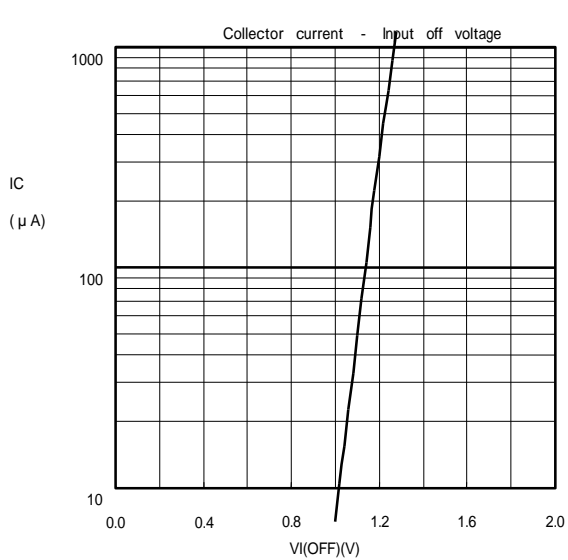


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ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)(RT1, RT2)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CEO}$	Collector to Emitter break down voltage	$I_C=100\ \mu\text{A}, R_{BE}=\text{---}$	50	-	-	V
I_{CBO}	Collector cut off current	$V_{CB}=50\text{V}, I_E=0\text{mA}$	-	-	0.1	μA
h_{FE}	DC forward current gain	$V_{CE}=5\text{V}, I_C=10\text{mA}$	50	-	-	-
$V_{CE(sat)}$	Collector to Emitter saturation voltage	$I_C=10\text{mA}, I_B=0.5\text{mA}$	-	0.1	0.3	V
$V_{I(ON)}$	Input on voltage	$V_{CE}=0.2\text{V}, I_C=5\text{mA}$	-	1.5	3.0	V
$V_{I(OFF)}$	Input off voltage	$V_{CE}=5\text{V}, I_C=100\ \mu\text{A}$	0.8	1.1	-	V
R_1	Input resistor		7	10	13	K
R_2/R_1	Resistor ratio		0.9	1.0	1.1	-
f_T	Gain band width product	$V_{CE}=6\text{V}, I_E=-10\text{mA}$	-	200	-	MHz





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Keep safety first in your circuit designs!

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