# RT2N23M

# COMPOSITE TRANSISTOR WITH RESISTOR FOR SWITCHING APPLICATION SILICON NPN EPITAXIAL TYPE

## DESCRIPTION

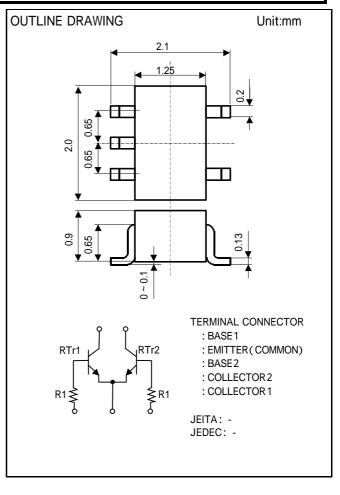
RT2N23M is a composite transistor with built-in bias resistor

# FEATURE

Built-in bias resistor (R1=47 K ) Mini package for easy mounting

## APPLICATION

Inverted circuit , switching circuit , interface circuit , driver circuit



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

Symbol	Parameter	Ratings	Unit
V <sub>CBO</sub>	Collector to Base voltage	50	V
V <sub>EBO</sub>	Emitter to Base voltage	6	V
V <sub>CEO</sub>	Collector to Emitter voltage	50	V
Ι <sub>c</sub>	Collector current	100	mA
I <sub>CM</sub>	Peak Collector current	200	mA
Pc	Collector dissipation (Total Ta=25 )	150	mW
Tj	Junction temperature	+ 150	
T <sub>stg</sub>	Storage temperature	-55 ~ +150	

MARKING			
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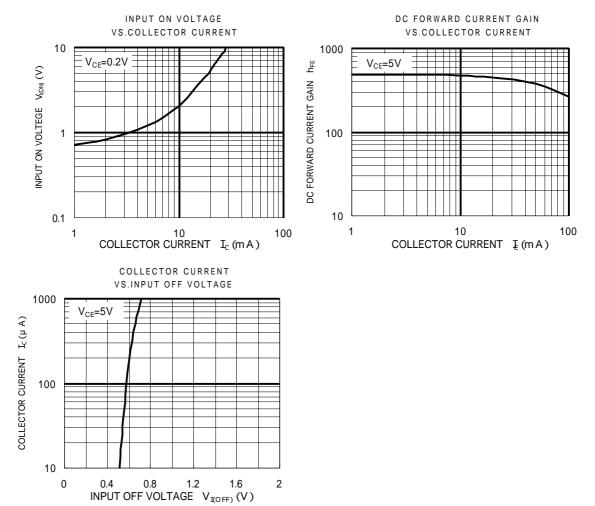
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# ELECTRICAL CHARACTERISTICS (Ta=25 )(RTr1, RTr2)

Symbol	Parameter		Limits			Unit
		Test conditions		Тур	Max	Unit
V <sub>(BR)CBO</sub>	C to E break down voltage	I <sub>C</sub> =100 μ A , R <sub>BE</sub> =	50	-	-	V
I <sub>CBO</sub>	Collector cut off current	$V_{CB}$ =50V , I <sub>E</sub> =0	-	-	0.1	μA
h <sub>FE</sub>	DC forward current gain	V <sub>CE</sub> =5V , I C=5mA	100	-	-	-
V <sub>CE(sat)</sub>	C to E saturation voltage	I <sub>c</sub> =10mA , I <sub>B</sub> =0.5mA	-	0.1	0.3	V
R <sub>1</sub>	Input resistor		33	47	61	К
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =6V , I <sub>E</sub> =-10mA		200		MHz

#### TYPICAL CHARACTERISTICS (Tr1, Tr2)





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