

**RT2N62M**

Composite Transistor  
For Muting Application  
Silicon NPN Epitaxial Type

**DESCRIPTION**

RT2N62M is a composite transistor with built-in bias resistor

**FEATURE**

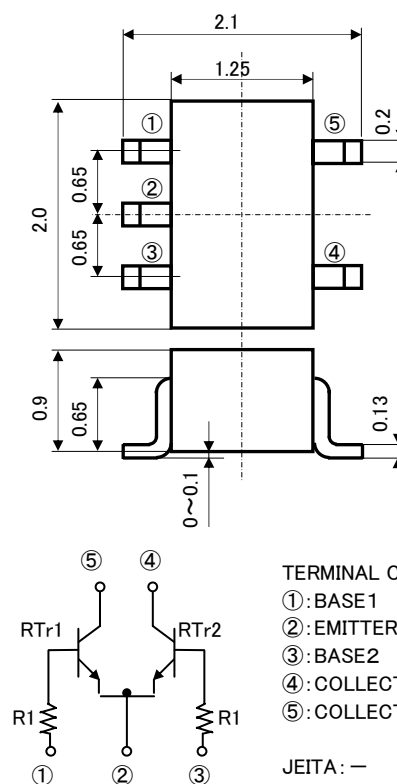
- Built-in bias resistor (  $R1=2.2\text{ K}\Omega$  )
- Mini package for easy mounting

**APPLICATION**

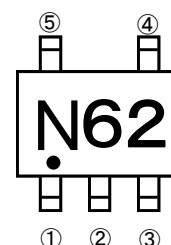
muting circuit、switching circuit

**OUTLINE DRAWING**

Unit:mm

**MAXIMUM RATINGS** ( $T_a=25^\circ\text{C}$ ) (RTTr1、RTTr2)

Symbol	Parameter	Ratings	Unit
$V_{CBO}$	Collector to Base voltage	40	V
$V_{EBO}$	Emitter to Base voltage	40	V
$V_{CEO}$	Collector to Emitter voltage	20	V
$I_C$	Collector current	400	mA
$P_C$	Collector dissipation (Total $T_a=25^\circ\text{C}$ )	150	mW
$T_j$	Junction temperature	+150	$^\circ\text{C}$
$T_{stg}$	Storage temperature	-55 ~ +150	$^\circ\text{C}$

**MARKING**

**RT2N62M**

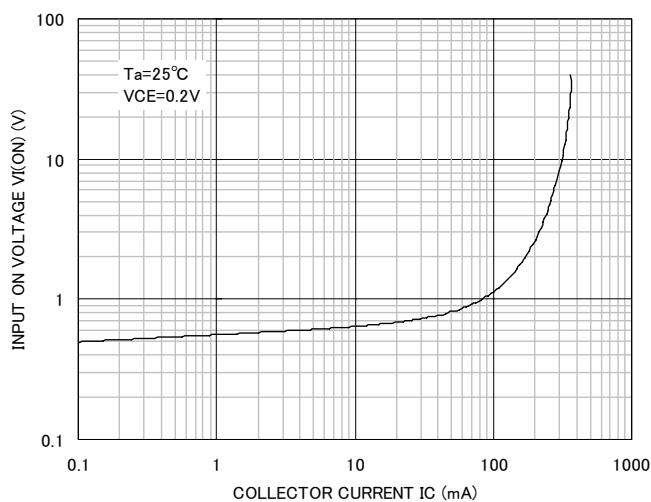
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## Electrical characteristics (Ta=25°C)

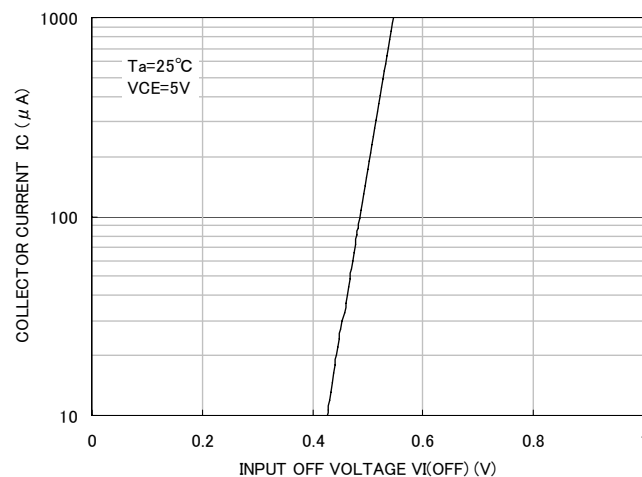
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{CBO}$	Collector-base breakdown voltage	$I_C=50\mu A, I_E=0mA$	40			V
$V_{EBO}$	Emitter-base breakdown voltage	$I_E=50\mu A, I_C=0mA$	40			V
$V_{CEO}$	Collector-emitter breakdown voltage	$I_C=1mA, R_{BE}=\infty$	20			V
$I_{CBO}$	Collector cutoff current	$V_{CB}=40V, I_E=0mA$			0.5	$\mu A$
$I_{EBO}$	Emitter cutoff current	$V_{EB}=40V, I_C=0mA$			0.5	$\mu A$
$h_{FE}$	DC current transfer ratio	$V_{CE}=5V, I_C=10mA$	820		2500	—
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=10mA, I_B=0.5mA$		10		mV
$R_I$	Input resistance	—	1.54	2.2	2.86	K $\Omega$
$f_T$	Transition frequency	$V_{CE}=10V, I_E=10mA, f=100MHz$		40		MHz
$R_{on}$	Output On-resistance	$V_{CE}=5V, f=1MHz$		0.70		$\Omega$

## TYPICAL CHARACTERISTICS (Tr1, Tr2)

INPUT ON VOLTAGE  
VS. COLLECTOR CURRENT



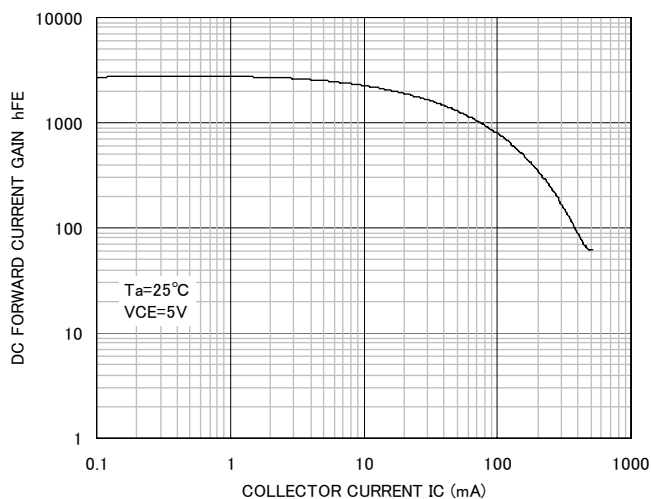
COLLECTOR CURRENT  
VS. INPUT OFF VOLTAGE



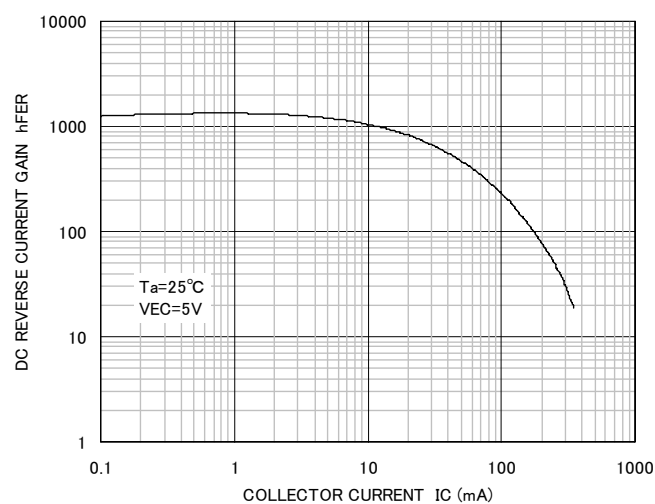
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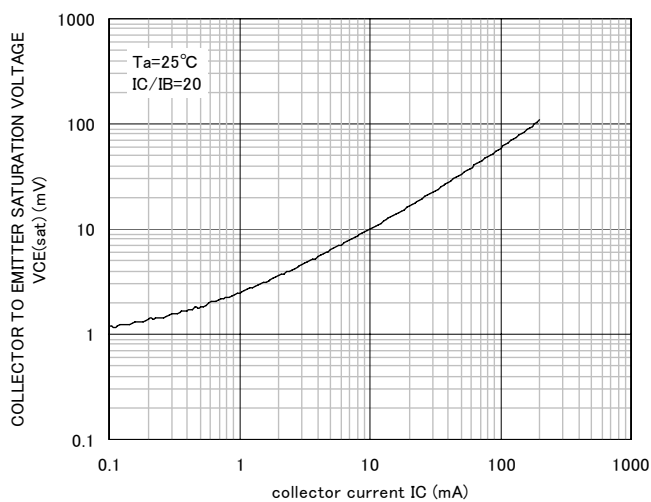
DC FORWARD CURRENT GAIN  
VS. COLLECTOR CURRENT



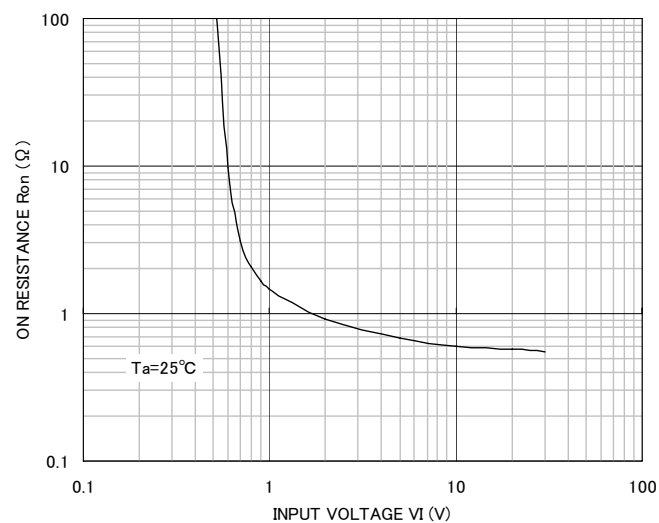
DC REVERSE CURRENT GAIN  
VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE  
VS. COLLECTOR CURRENT



ON RESISTANCE VS. INPUT VOLTAGE





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