

RT2N65M

Composite Transistor
For Muting Application
Silicon NPN Epitaxial Type

DESCRIPTION

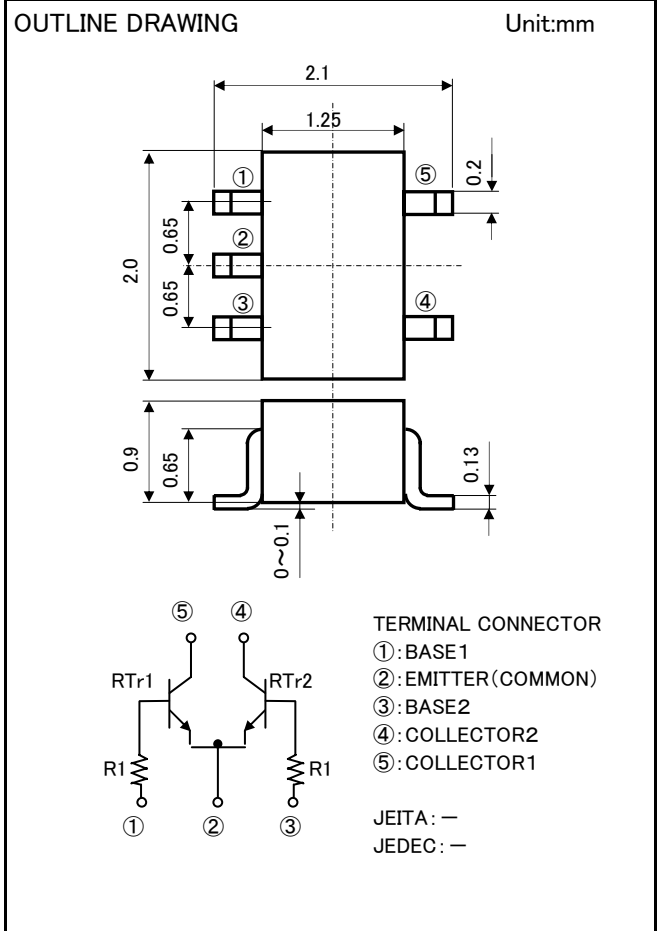
RT2N65M is a composite transistor with built-in bias resistor

FEATURE

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

APPLICATION

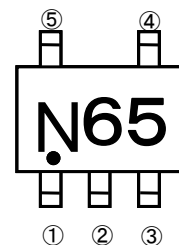
muting circuit、switching circuit



MAXIMUM RATINGS (Ta=25°C) (RTr1、RTr2)

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 Ta=25°C)	150	mW
T _j	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55~+150	°C

MARKING



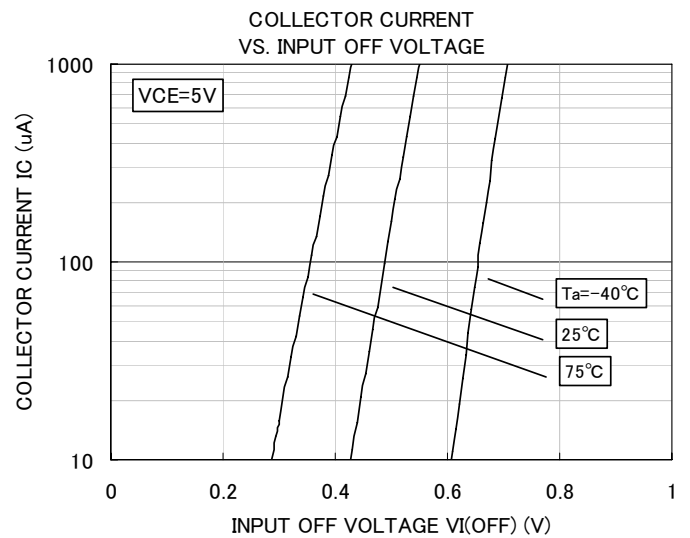
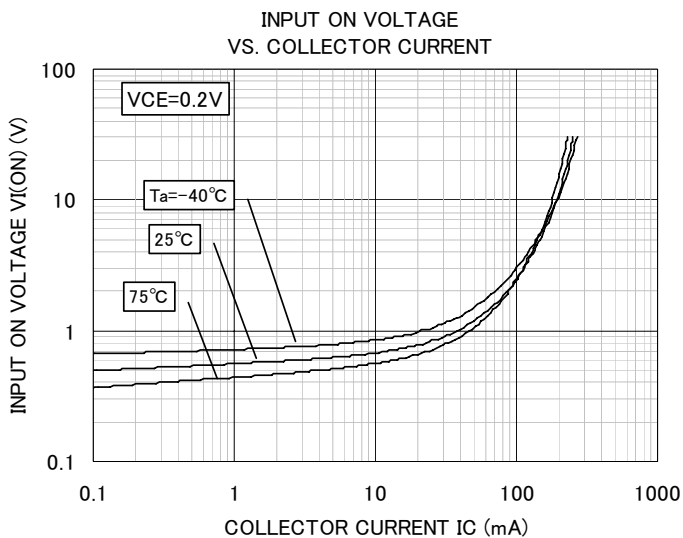
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Electrical characteristics (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V _{CB0}	Collector-base breakdown voltage	I _C =50 μA, I _E =0mA	40			V
V _{EB0}	Emitter-base breakdown voltage	I _E =50 μA, I _C =0mA	40			V
V _{CE0}	Collector-emitter breakdown voltage	I _C =1mA, R _{BE} =∞	20			V
I _{CB0}	Collector cutoff current	V _{CB} =40V, I _E =0mA			0.5	μA
I _{EB0}	Emitter cutoff current	V _{EB} =40V, I _C =0mA			0.5	μA
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	-	7	10	13	KΩ
f _T	Transition frequency	V _{CE} =10V, I _E =-10mA, f=100MHz		35		MHz
R _{on}	Output On-resistance	V _I =7V, f=1MHz		0.94		Ω

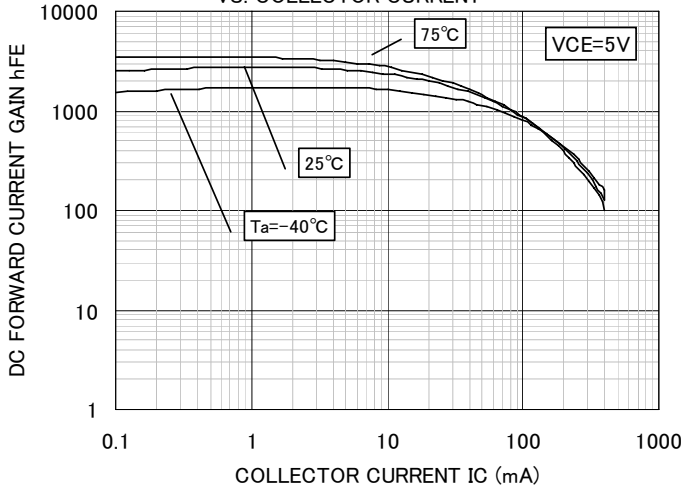
TYPICAL CHARACTERISTICS (Tr1, Tr2)



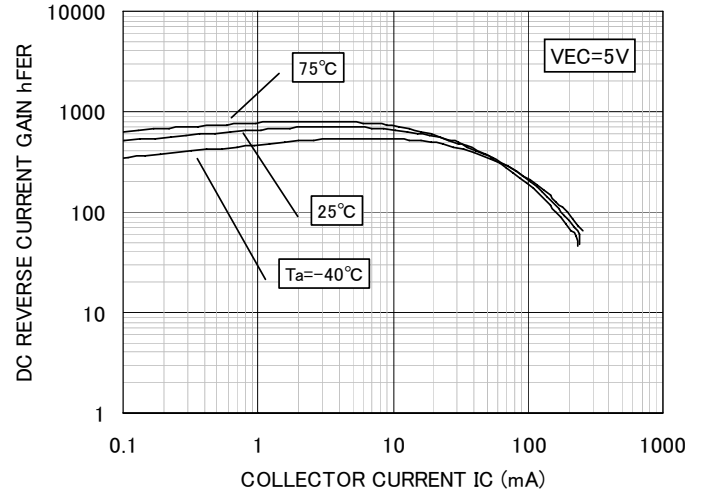
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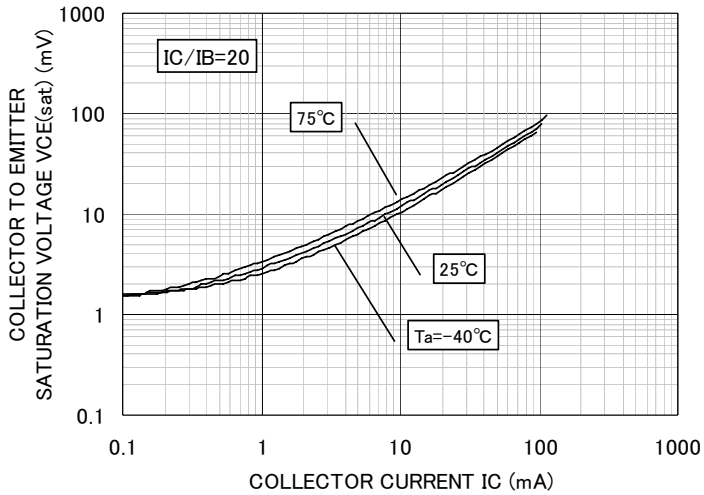
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



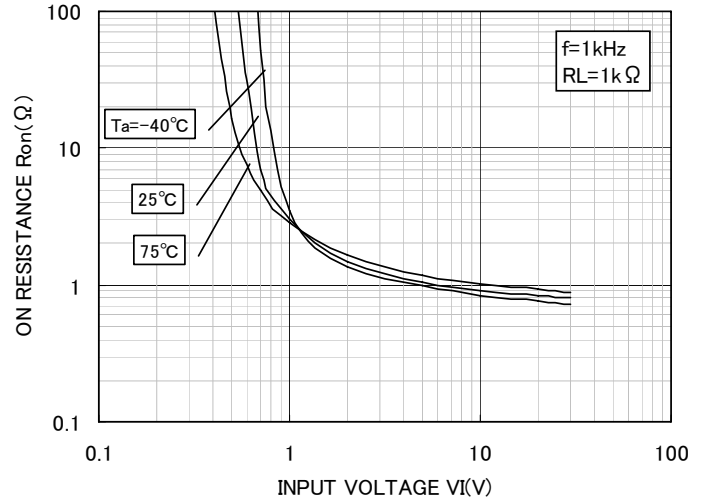
DC REVERSE CURRENT GAIN
VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE
VS. COLLECTOR CURRENT



ON RESISTANCE VS. INPUT VOLTAGE





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