

# RT3CXXM

Composite Transistor  
For Muting Application  
Silicon NPN Epitaxial Type

## DESCRIPTION

RT3CXXM is compound transistor built with two INC2002A chips in SC-88 package.

## FEATURE

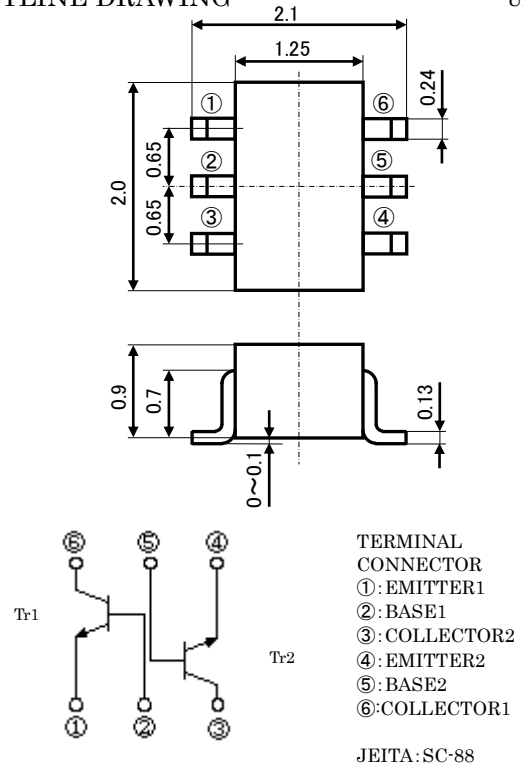
- Small package for easy mounting.
- High reverse  $h_{FE}$
- Small collector to emitter saturation voltage.  
 $V_{CE(sat)}=40mV_{(TYP.)} (@I_C=50mA/I_B=2.5mA)$
- Low on Resistance  
 $R_{ON}=0.65\Omega_{(TYP.)} (@ I_B=5mA)$

## APPLICATION

muting circuit, switching circuit

## OUTLINE DRAWING

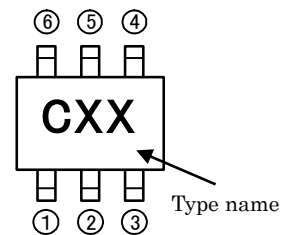
Unit: mm



## MAXIMUM RATING (Ta=25°C) (Tr1, Rr2)

SYMBOL	PARAMETER	RATING	UNIT
V <sub>CB0</sub>	Collector to Base voltage	50	V
V <sub>EB0</sub>	Emitter to Base voltage	50	V
V <sub>CEO</sub>	Collector to Emitter voltage	20	V
I <sub>C</sub>	Collector current	600	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



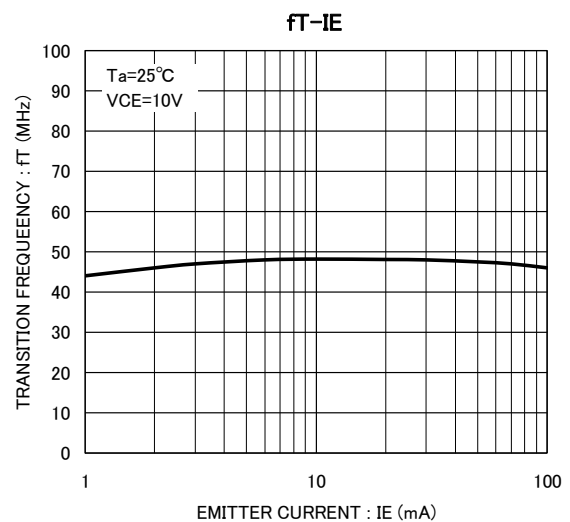
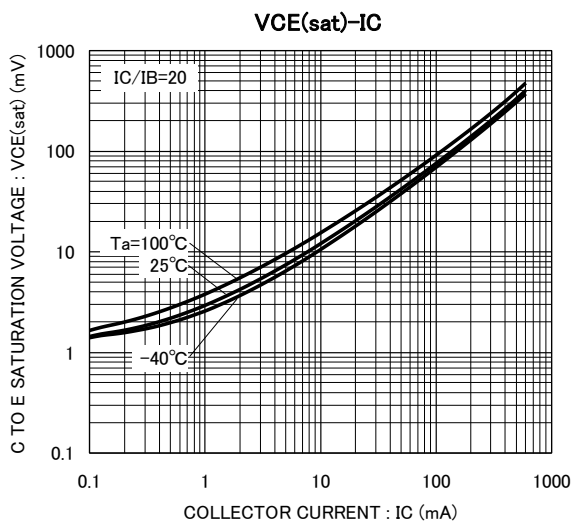
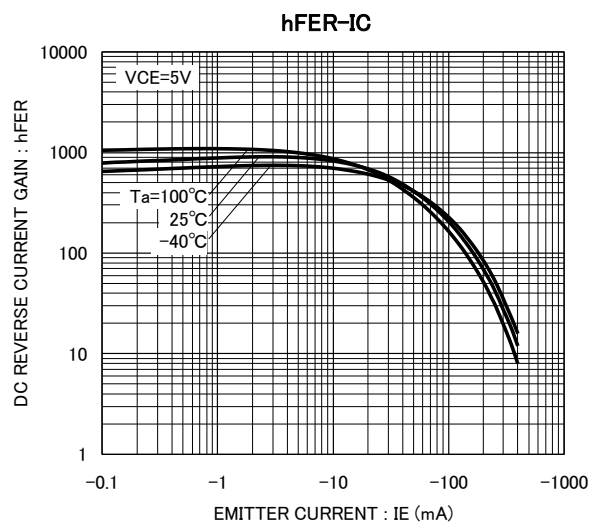
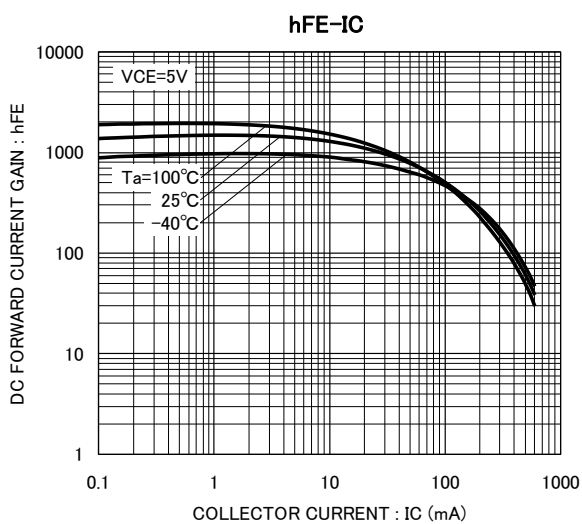
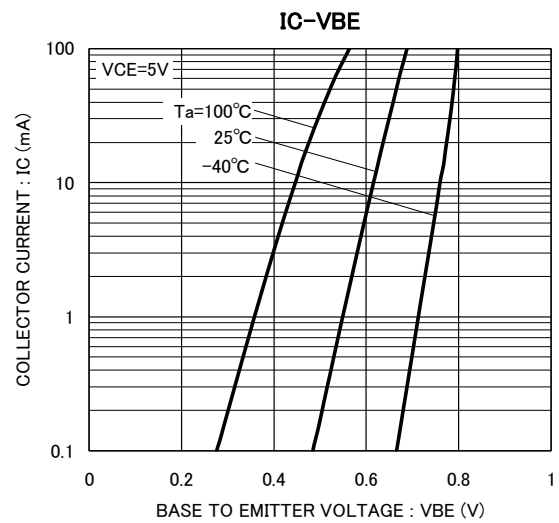
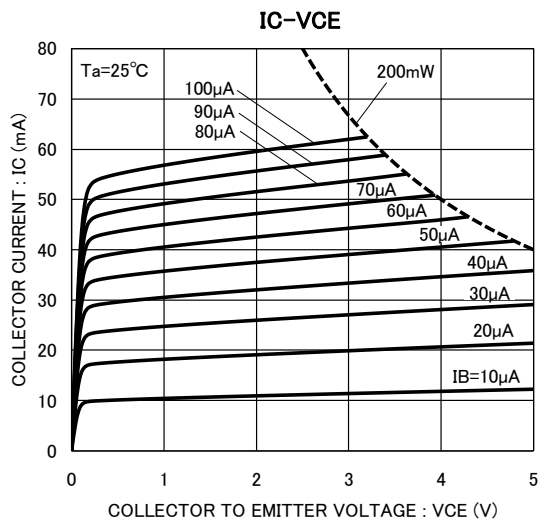
## ELECTRICAL CHARACTERISTICS (Ta=25°C) (Tr1, Rr2)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V <sub>(BR)CBO</sub>	C to B break down voltage	I <sub>C</sub> =50μA, I <sub>E</sub> =0	50	—	—	V
V <sub>(BR)EBO</sub>	E to B break down voltage	I <sub>E</sub> =50μA, I <sub>C</sub> =0	50	—	—	V
V <sub>(BR)CEO</sub>	C to E break down voltage	I <sub>C</sub> =1mA, R <sub>BE</sub> =∞	20	—	—	V
I <sub>CB0</sub>	Collector cut off current	V <sub>CB</sub> =50V, I <sub>E</sub> =0	—	—	0.5	μA
I <sub>EBO</sub>	Emitter cut off current	V <sub>EB</sub> =50V, I <sub>C</sub> =0	—	—	0.5	μA
h <sub>FE</sub>	DC forward current gain	V <sub>CE</sub> =5V, I <sub>C</sub> =10mA	820	—	2500	—
V <sub>CE(sat)</sub>	C to E saturation voltage	I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA	—	40	150	mV
f <sub>T</sub>	Gain band width product	V <sub>CE</sub> =10V, I <sub>E</sub> =-10mA, f=100MHz	—	40	—	MHz
C <sub>ob</sub>	Collector output capacitance	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz	—	4.0	—	pF
R <sub>ON</sub>	Output "ON" resistance	I <sub>B</sub> =5mA, R <sub>L</sub> =1kΩ	—	0.65	—	Ω

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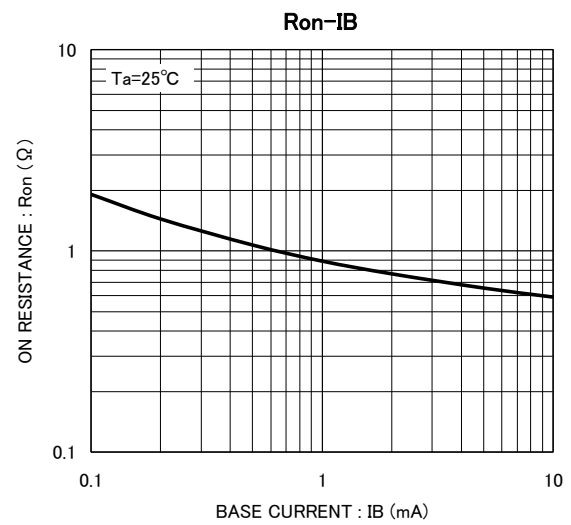
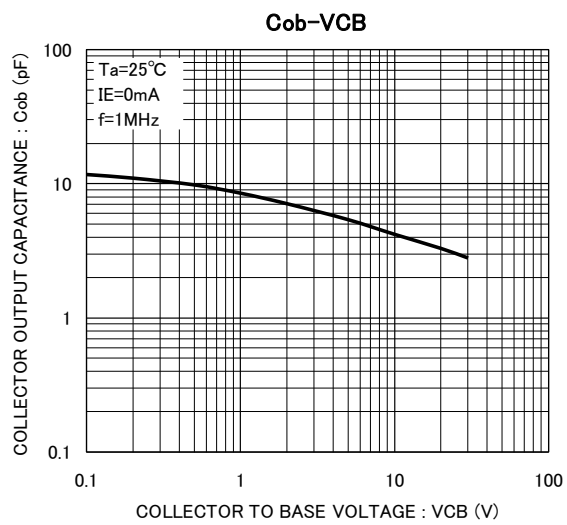
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## TYPICAL CHARACTERISTICS (Tr1, Tr2)



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