

RT3X99M

Composite Transistor With Resistor
For Muting Application
Silicon Epitaxial Type

DESCRIPTION

RT3X99M is composite transistor built with two RTAN230 chips in SC-88 package.

FEATURE

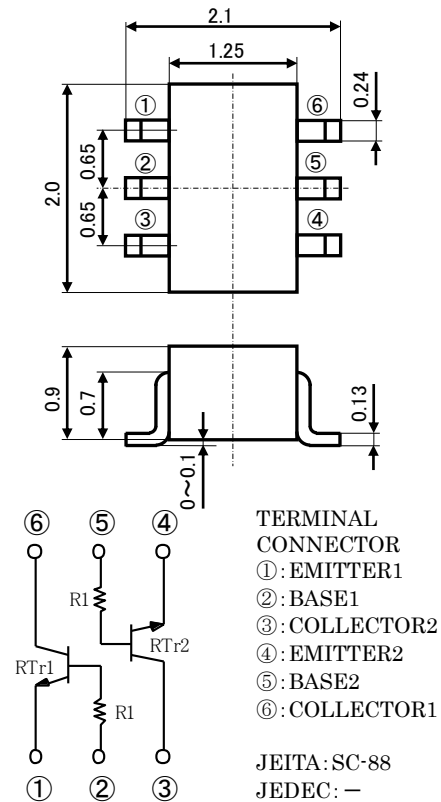
- Built-in bias resistor ($R_1=2.2k\Omega$)
- Mini package for easy mounting
- High reverse h_{FE} .
- Small collector to emitter saturation voltage.
 $V_{CE(sat)}=10mV(TYP.)(@I_C=10mA/I_B=0.5mA)$
- Low on Resistor.
 $R_{ON}=0.70\Omega(TYP.)(@V_I=5V)$

APPLICATION

Muting circuit, Switching circuit

OUTLINE DRAWING

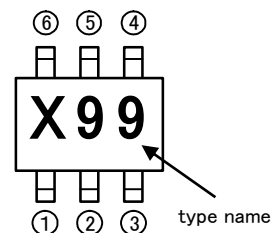
Unit:mm



MAXIMUM RATING($T_a=25^\circ C$)(RT_{r1}, RT_{r2} COMMON)

SYMBOL	PARAMETER	RATING	UNIT
V _{CB0}	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 _T	Total dissipation	150	mW
T _j	Junction temperature	+150	°C
T _{stg}	Storage temperature	-55~+150	°C

MARKING



ELECTRICAL CHARACTERISTICS($T_a=25^\circ C$)(RT_{r1}, RT_{r2} COMMON)

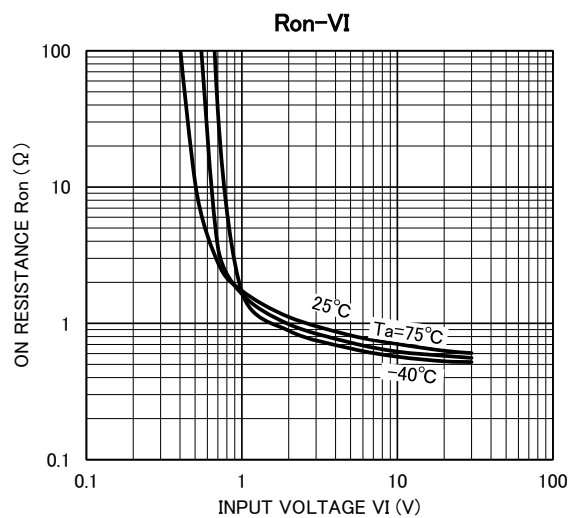
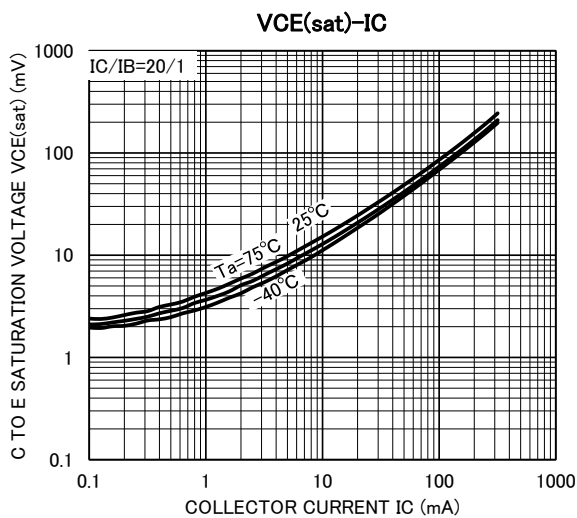
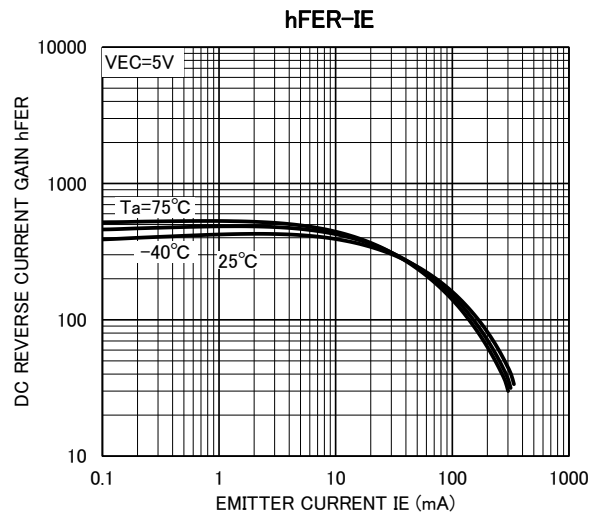
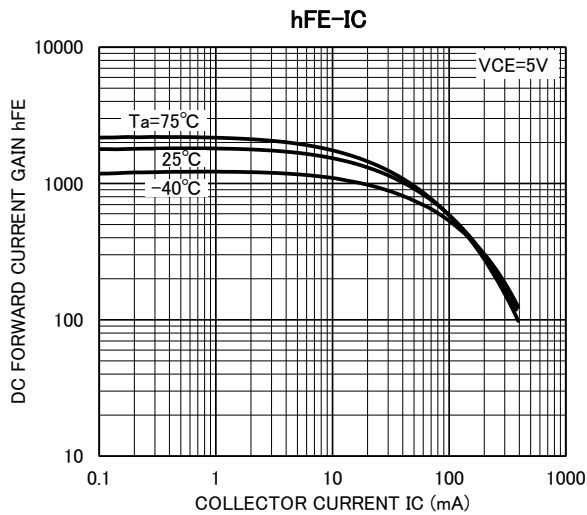
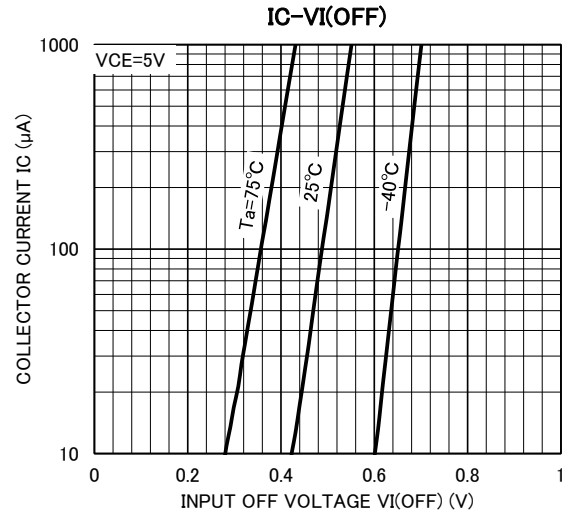
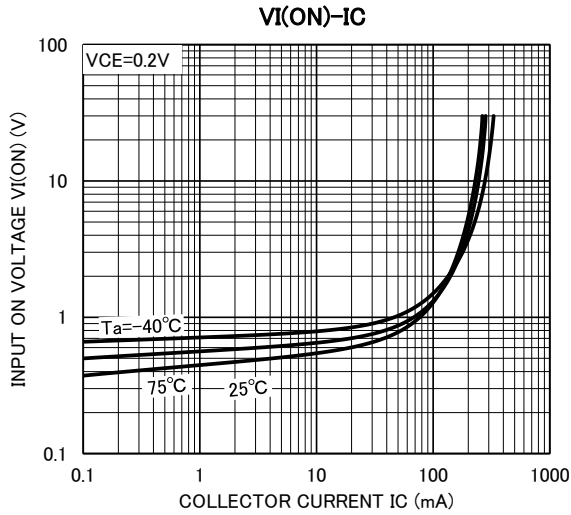
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX	
V _{(BR)CBO}	Collector to Base breakdown voltage	$I_C=50\mu A, I_E=0$	40	-	-	V
V _{(BR)EBO}	Emitter to Base breakdown voltage	$I_E=50\mu A, I_C=0$	40	-	-	V
V _{(BR)CEO}	Collector to Emitter breakdown voltage	$I_C=1mA, R_{BE}=\infty$	20	-	-	V
I _{CB0}	Collector cut off current	$V_{CB}=40V, I_E=0$	-	-	0.5	μA
I _{EBO}	Emitter cut off current	$V_{EB}=40V, I_C=0$	-	-	0.5	μA
h_{FE}	DC forward current gain	$V_{CE}=5V, I_C=10mA$	820	-	2500	-
V _{CE(sat)}	Collector to Emitter saturation voltage	$I_C=10mA, I_B=0.5mA$	-	10	-	mV
R ₁	Input resistor	-	1.54	2.2	2.86	k Ω
f _T	Gain band width product	$V_{CE}=10V, I_E=-10mA, f=100MHz$	-	40	-	MHz
R _{ON}	Output On-resistor	$V_I=5V, R_L=1k\Omega$	-	0.70	-	Ω

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Silicon Epitaxial Type

TYPICAL CHARACTERISTICS

(RT_r1, RT_r2 COMMON)



Keep safety first in your circuit designs!

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