

RT3XAAM

Composite Transistor
For Muting Application
Silicon NPN Epitaxial Type

DESCRIPTION

RT3XAAM is a composite transistor with built-in bias resistor

FEATURE

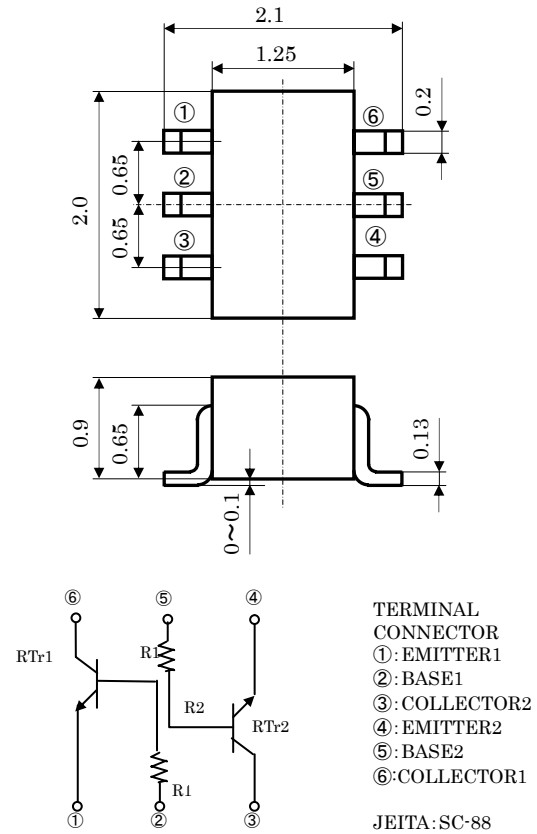
- Built-in bias resistor ($R1=4.7\text{ K}\Omega$)
- Mini package for easy mounting

APPLICATION

muting circuit、switching circuit

OUTLINE DRAWING

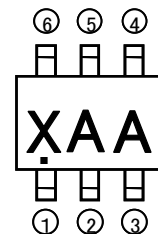
Unit: mm



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$) (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 $T_a=25^\circ\text{C}$)	150	mW
T_{j}	Junction temperature	+150	$^\circ\text{C}$
T_{stg}	Storage temperature	-55~+150	$^\circ\text{C}$

MARKING



RT3XAAM

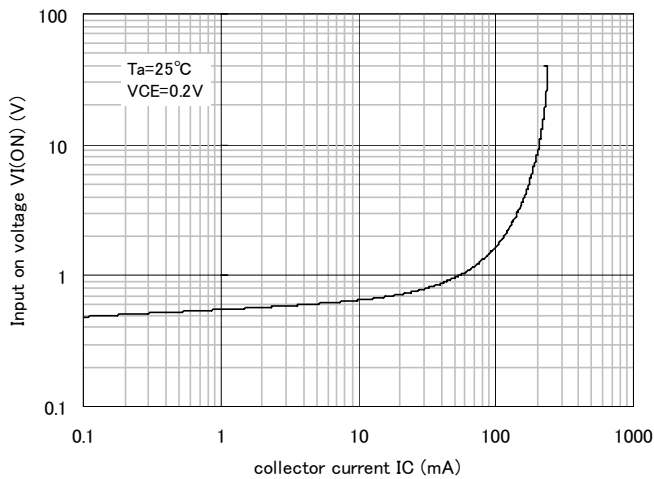
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Electrical characteristics (Ta=25°C)

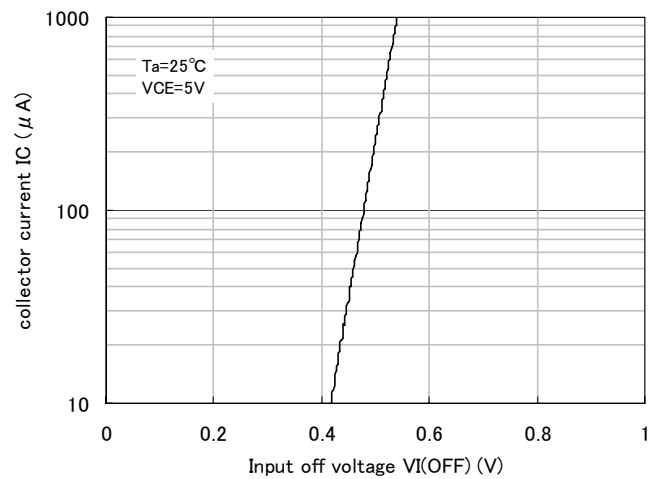
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V _{CBO}	Collector-base breakdown voltage	I _C =50 μA, I _E =0mA	40			V
V _{EBO}	Emitter-base breakdown voltage	I _E =50 μA, I _C =0mA	40			V
V _{CEO}	Collector-emitter breakdown voltage	I _C =1mA, R _{BE} =∞	20			V
I _{CBO}	Collector cutoff current	V _{CB} =40V, I _E =0mA			0.5	μA
I _{EBO}	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	-	3.29	4.7	6.11	KΩ
f _T	Transition frequency	V _{CE} =10V, I _E =-10mA, f=100MHz		38		MHz
R _{on}	Output On-resistance	V _I =5V, f=1MHz		0.80		Ω

TYPICAL CHARACTERISTICS (Tr1, Tr2)

Input on voltage - collector current



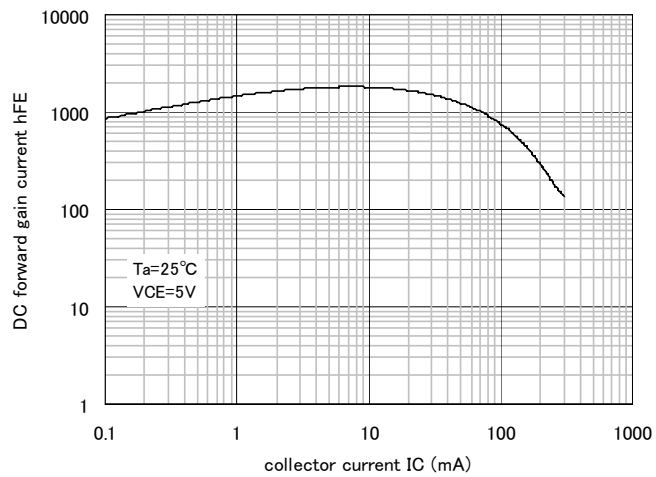
collector current - Input on voltage



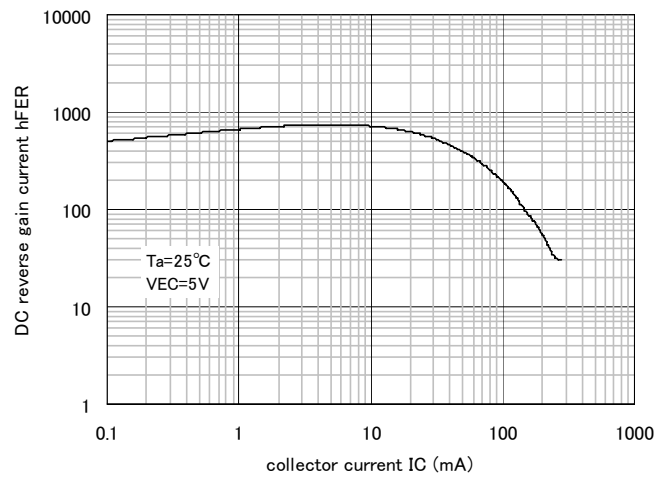
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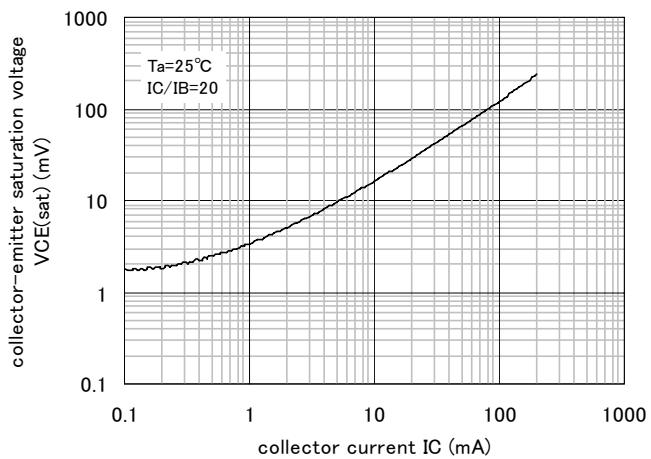
DC forward gain current - collector current



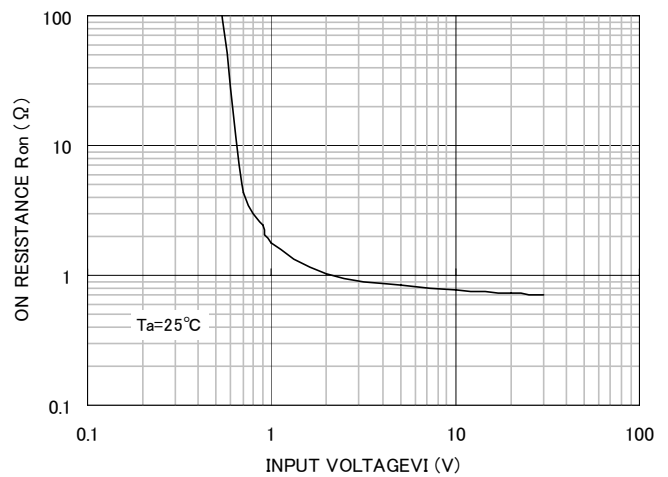
DC reverse gain current - collector current



collector-emitter saturation voltage - collector current



Ron-VIN





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