

RTAN430X SERIES

Transistor With Resistor
For Muting Application
Silicon NPN Epitaxial Type

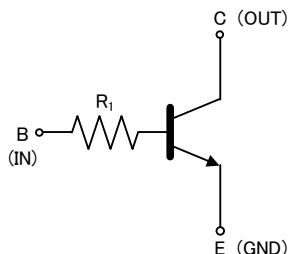
FEATURE

- Built-in bias resistor ($R_1=4.7k\Omega$).
- Small 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.
 $R_{ON}=0.80\Omega_{(TYP.)}$ ($@V_I=5V$)

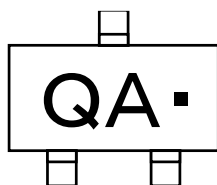
APPLICATION

muting circuit, switching circuit

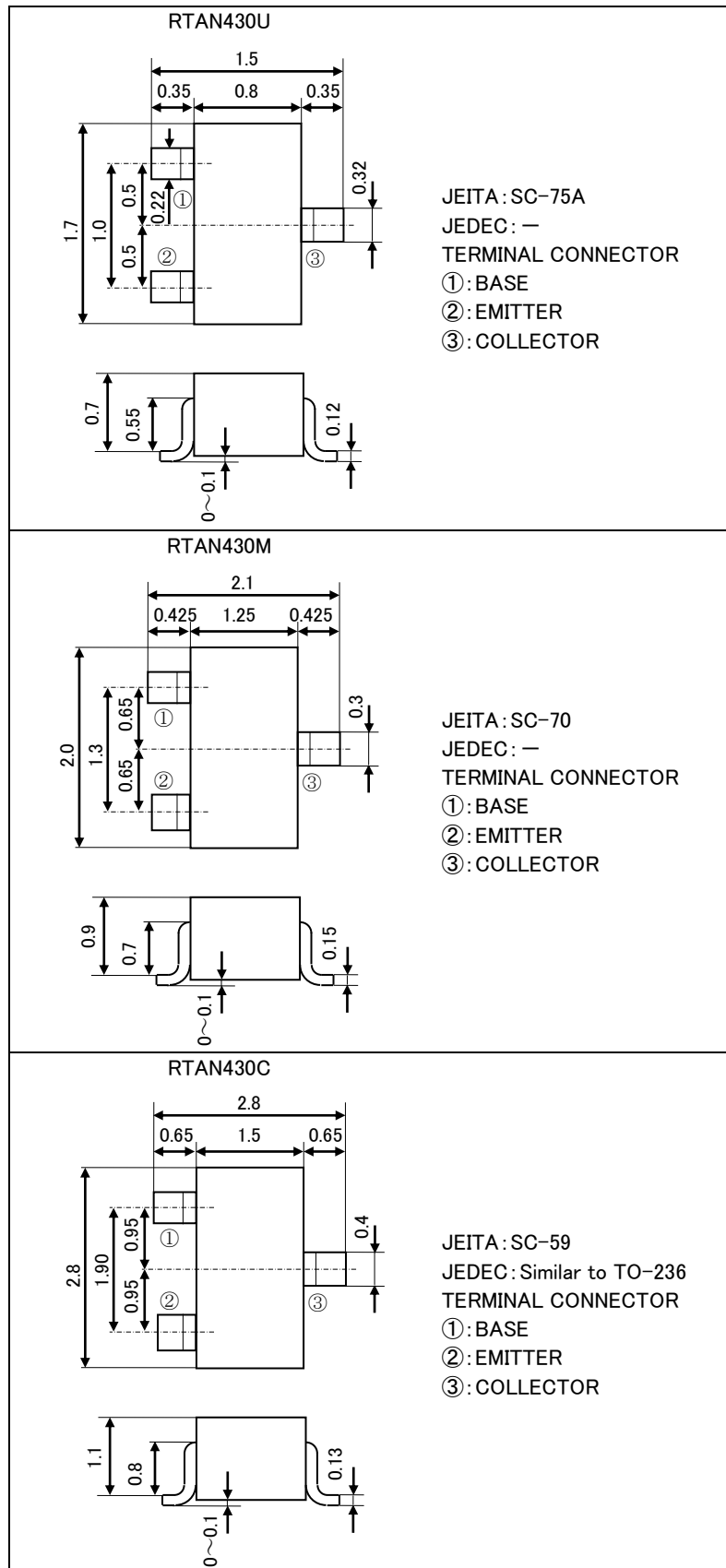
EQUIVALENT CIRCUIT



MARKING



OUTLINE DRAWING (UNIT : mm)



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MAXIMUM RATING (Ta=25°C)

PARAMETER	SYMBOL	RATING			UNIT
		RTAN430U	RTAN430M	RTAN430C	
Collector to Base voltage	V_{CBO}	40			V
Emitter to Base voltage	V_{EBO}	40			V
Collector to Emitter voltage	V_{CEO}	20			V
Collector current	I_C	400			mA
Collector dissipation	P_C	150	200		mW
Junction temperature	T_j	+150			°C
Storage temperature	T_{stg}	-55~+150			°C

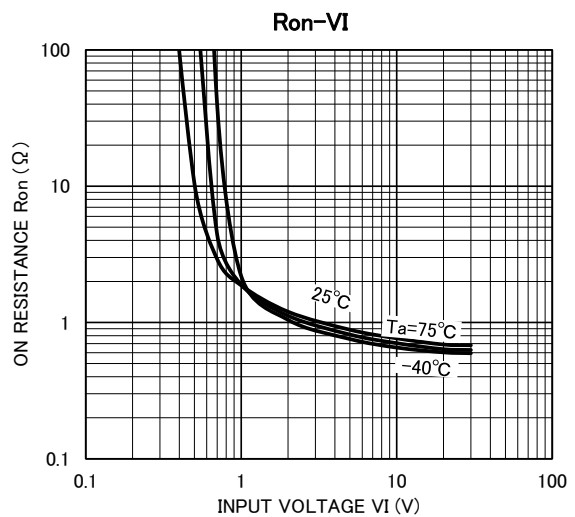
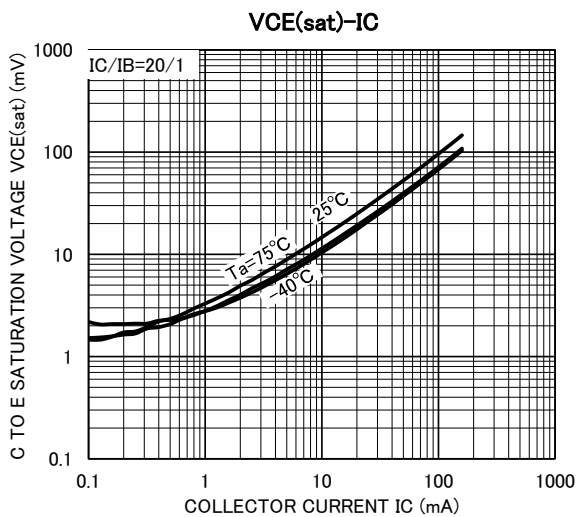
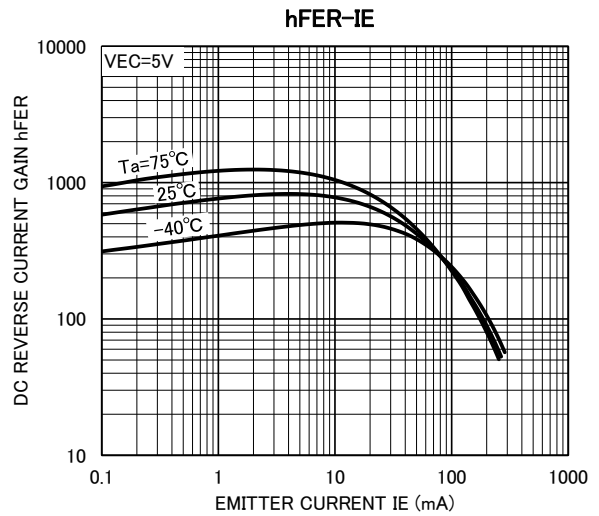
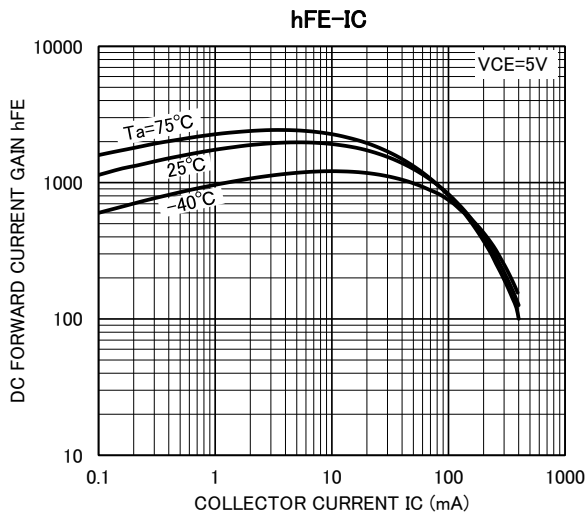
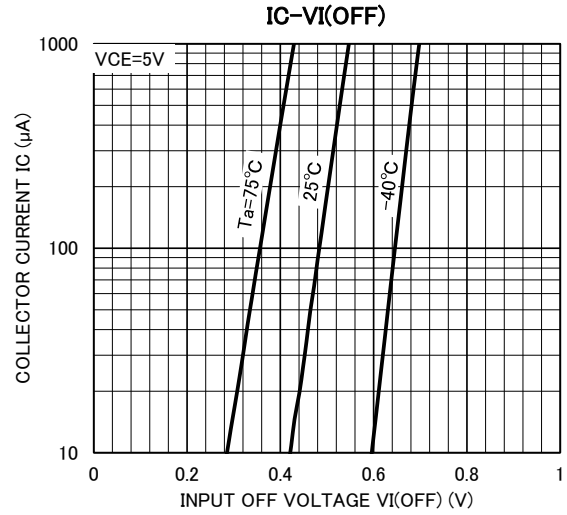
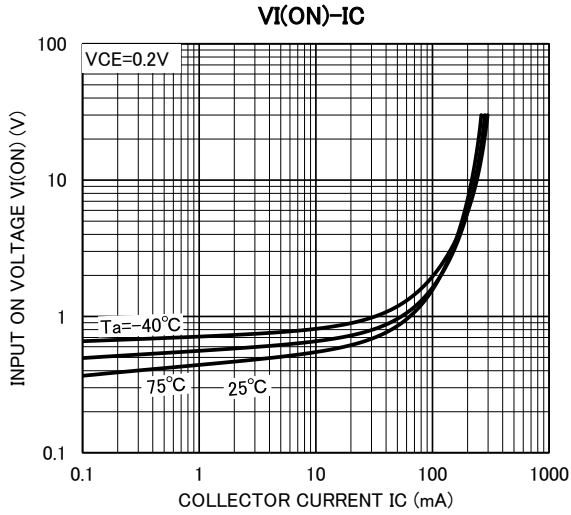
ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
C to E breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu A, I_E=0mA$	40	-	-	V
E to B breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu A, I_C=0mA$	40	-	-	V
C to B breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	20	-	-	V
Collector cut off current	I_{CBO}	$V_{CB}=40V, I_E=0mA$	-	-	0.5	μA
Emitter cut off current	I_{EBO}	$V_{EB}=40V, I_C=0mA$	-	-	0.5	μA
DC forward current gain	h_{FE}	$V_{CE}=5V, I_C=10mA$	820	-	2500	-
C to E saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=0.5mA$	-	10	-	mV
Input resistor	R_1	-	3.29	4.7	6.11	k Ω
Gain band width product	f_T	$V_{CE}=10V, I_E=-10mA, f=100MHz$	-	38	-	MHz
Output "ON" resistor	R_{ON}	$V_I=5V, R_L=1k\Omega$	-	0.80	-	Ω

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TYPICAL CHARACTERISTICS



Keep safety first in your circuit designs!

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