

INC2002AX SERIES

FOR MUTING APPLICATION
SILICON NPN EPITAXIAL TYPE

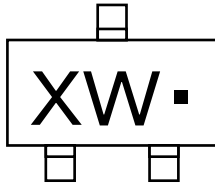
FEATURE

- 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
 $R_{ON}=0.65\Omega_{(TYP.)}$ ($@I_B=5mA$)

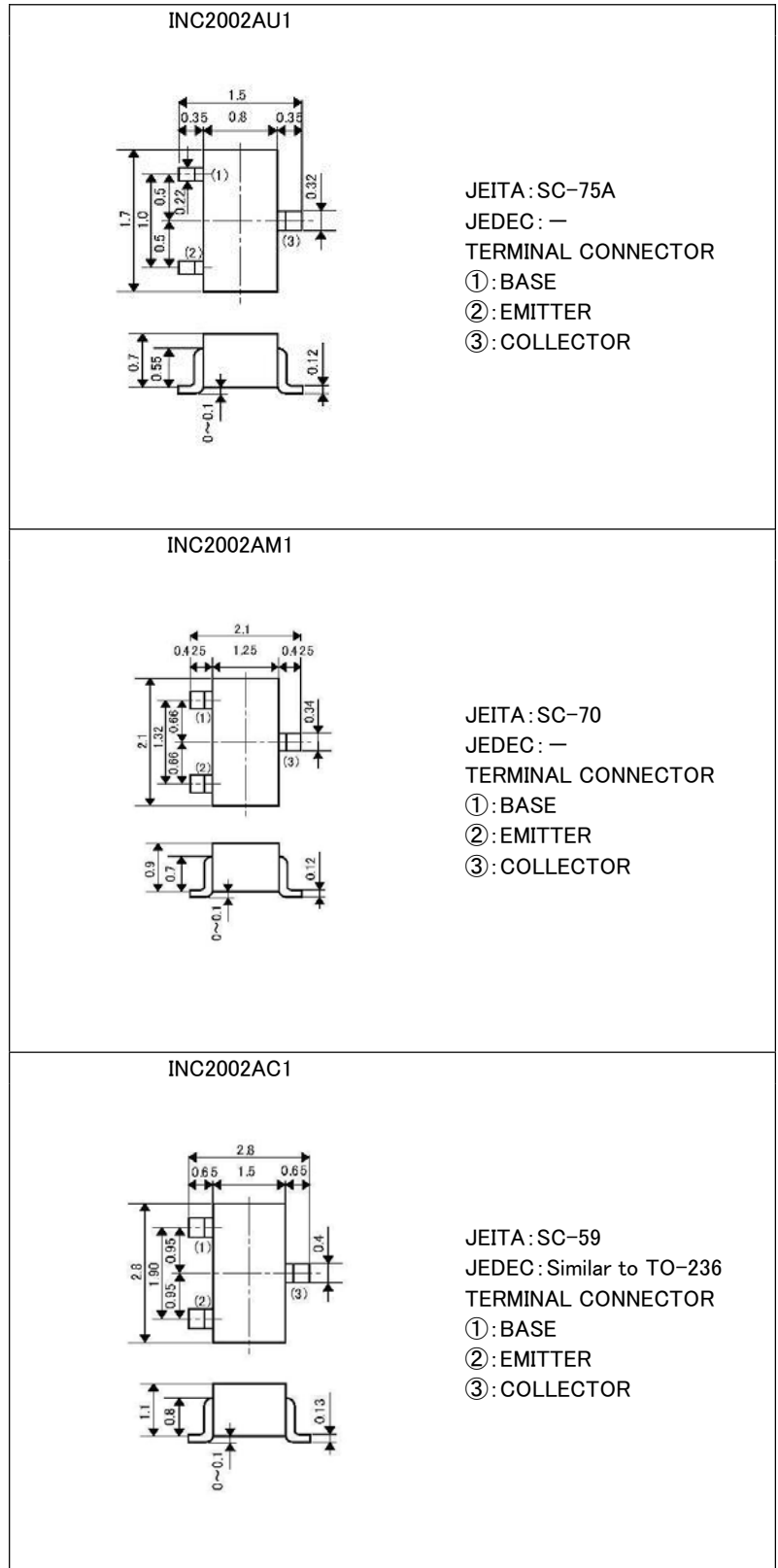
APPLICATION

muting circuit , switching circuit

MARKING



OUTLINE DRAWING (Unit : mm)



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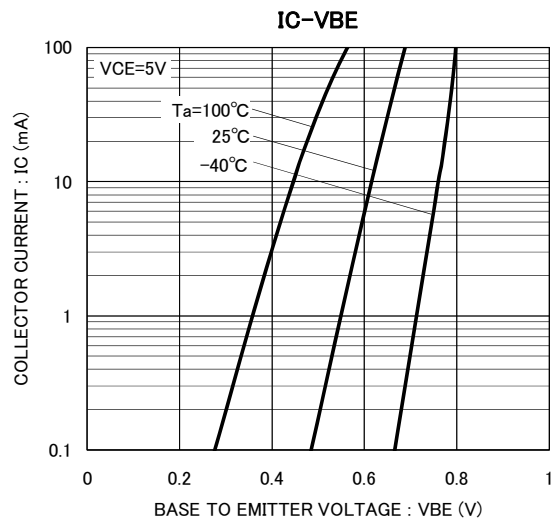
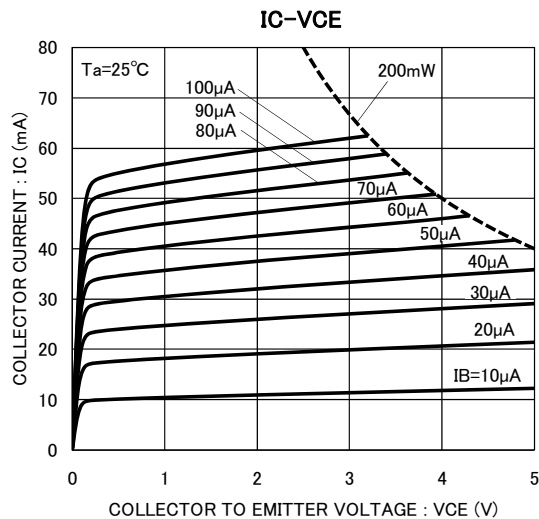
MAXIMUM RATING (Ta=25°C)

PARAMETER	SYMBOL	RATING			UNIT
		INC2002AU1	INC2002AM1	INC2002AC1	
Collector to Base voltage	V_{CBO}	50			V
Collector to Emitter voltage	V_{CEO}	20			V
Emitter to Base voltage	V_{EBO}	50			V
Collector current	I_C	600			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)

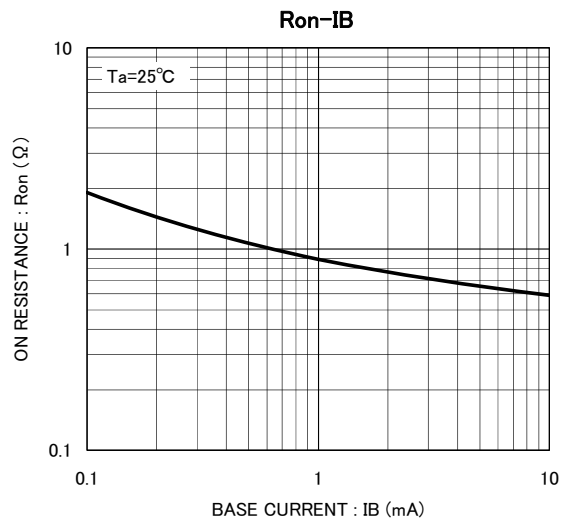
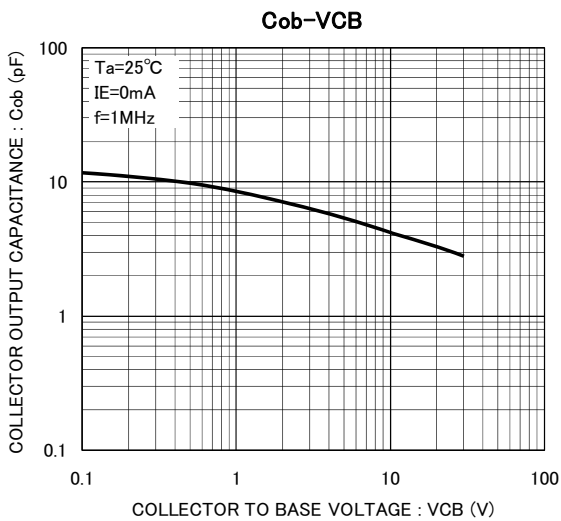
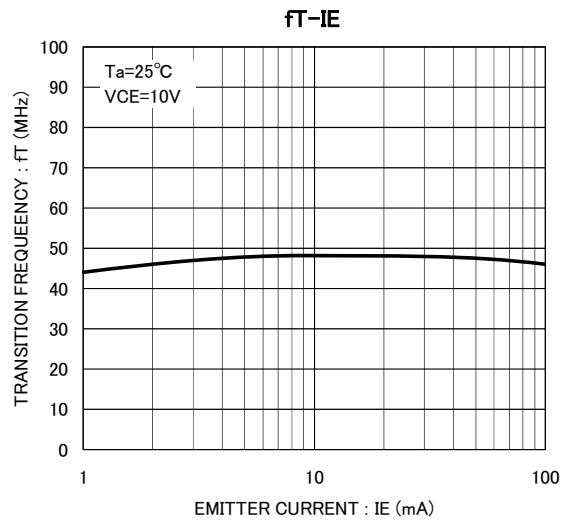
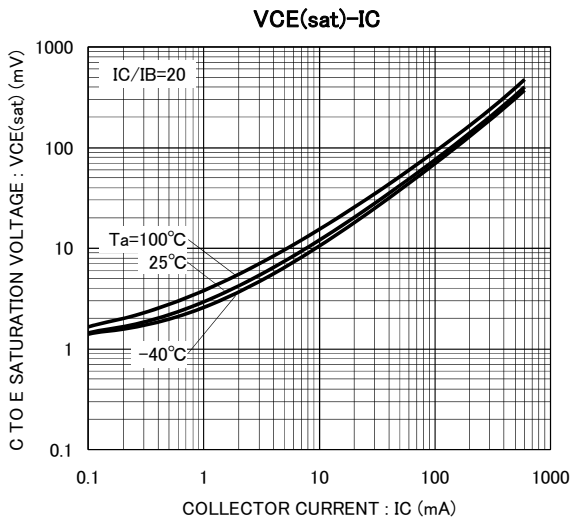
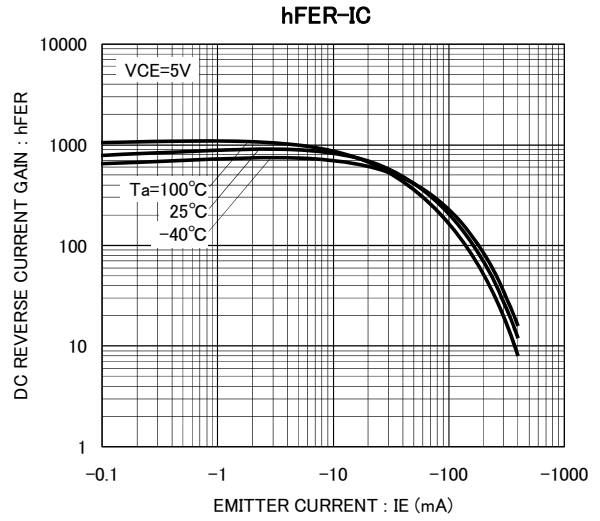
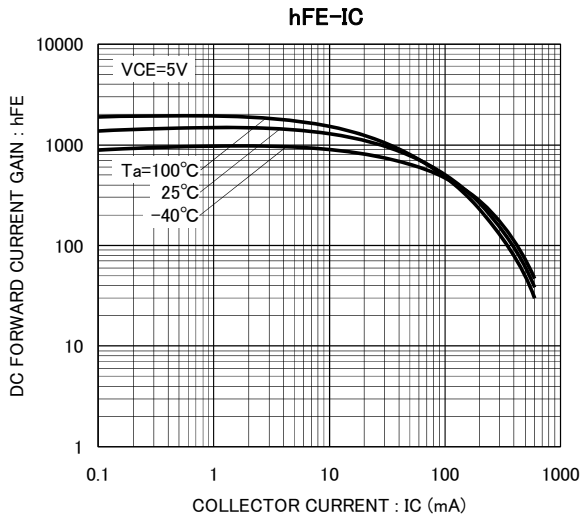
PARAMETER	SYMBOL	TEST CONCITION	LIMIT			UNIT
			MIN	TYP	MAX	
C to B break down voltage	$V_{(BR)CBO}$	$I_C=50\mu A, I_E=0mA$	50	-	-	V
C to E break down voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	20	-	-	V
E to B break down voltage	$V_{(BR)EBO}$	$I_E=50\mu A, I_C=0mA$	50	-	-	V
Collector cut off current	I_{CBO}	$V_{CB}=50V, I_E=0mA$	-	-	0.5	μA
Emitter cut off current	I_{EBO}	$V_{EB}=50V, I_C=0mA$	-	-	0.5	μA
DC forward current gain	h_{FE}	$V_{CE}=5V, I_C=10mA$	820	-	2500	-
C to E saturation voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=2.5mA$	-	40	150	mV
Gain band width product	f_T	$V_{CE}=10V, I_E=-10mA, f=100MHz$	-	40	-	MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0A, f=1MHz$	-	4.0	-	pF
Output On-resistance	R_{ON}	$I_B=5mA$	-	0.65	-	Ω

TYPICAL CHARACTERISTICS



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