

INC2002AX SERIES

FOR MUTING APPLICATION
SILICON NPN EPITAXIAL TYPE

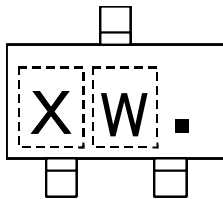
FEATURE

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

APPLICATION

muting circuit , switching circuit

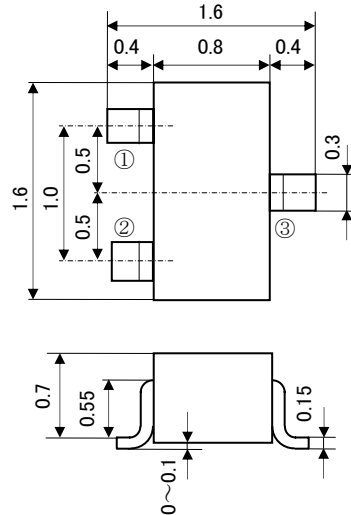
MARKING



OUTLINE DRAWING

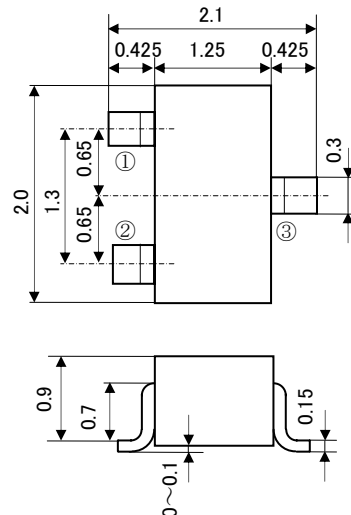
Unit : mm

INC2002AU1



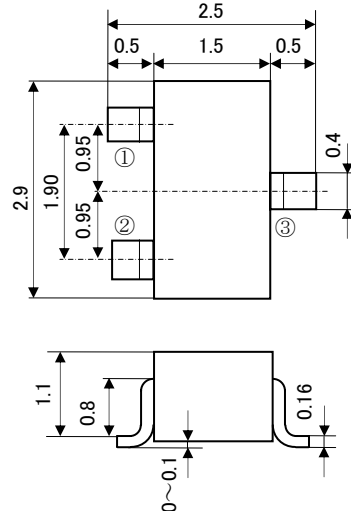
JEITA: SC-75A
JEDEC: —
TERMINAL CONNECTOR
①: BASE
②: EMITTER
③: COLLECTOR

INC2002AM1



JEITA: SC-70
JEDEC: —
TERMINAL CONNECTOR
①: BASE
②: EMITTER
③: COLLECTOR

INC2002AC1



JEITA: SC-59
JEDEC: Similar to TO-236
TERMINAL CONNECTOR
①: BASE
②: EMITTER
③: COLLECTOR

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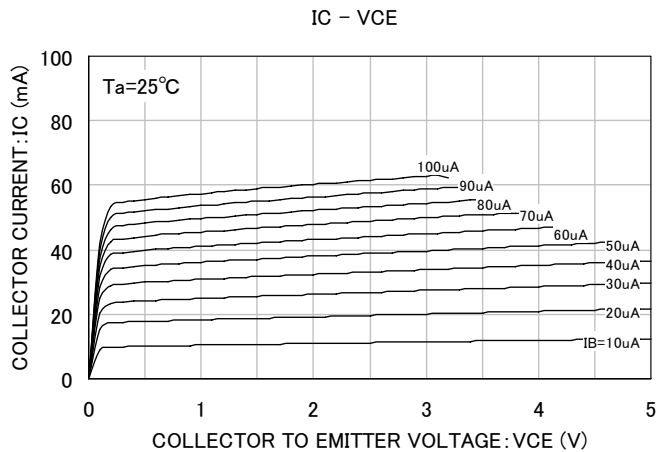
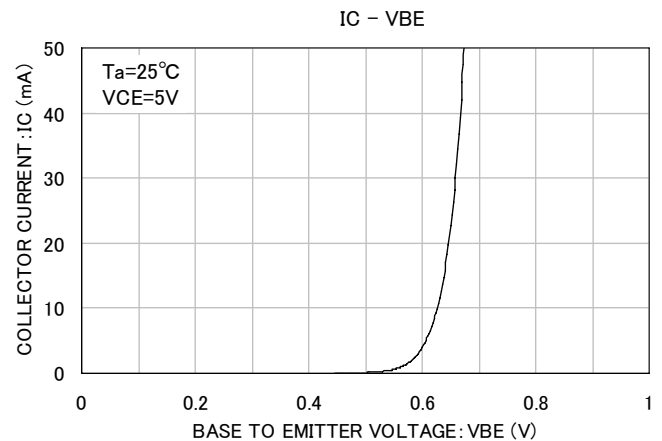
MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING			UNIT
		INC2002AU1	INC2002AM1	INC2002AC1	
V _{CBO}	Collector to Base voltage	50			V
V _{EBO}	Emitter to Base voltage	50			V
V _{CEO}	Collector to Emitter voltage	20			V
I _C	Collector current	600			mA
P _C	Collector dissipation(Ta=25℃)	150	200		mW
Tj	Junction temperature	+150			℃
Tstg	Storage temperature	-55~+150			℃

ELECTRICAL CHARACTERISTICS (Ta=25°C)

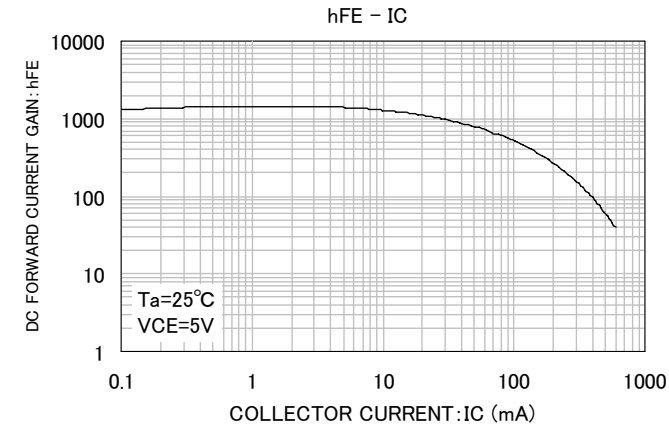
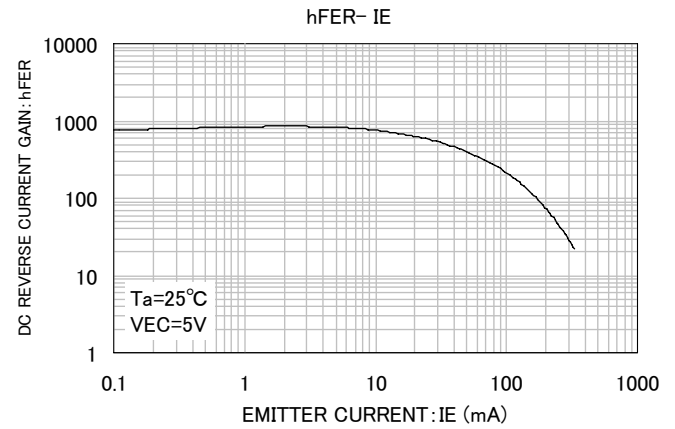
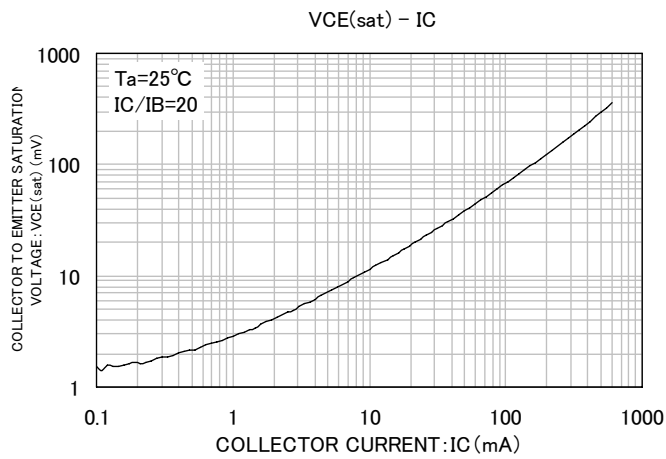
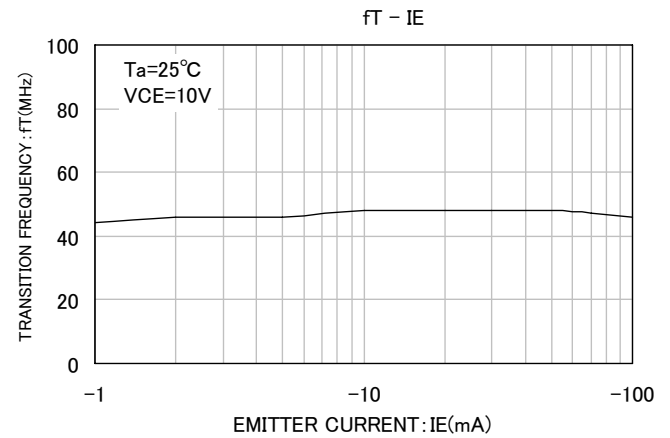
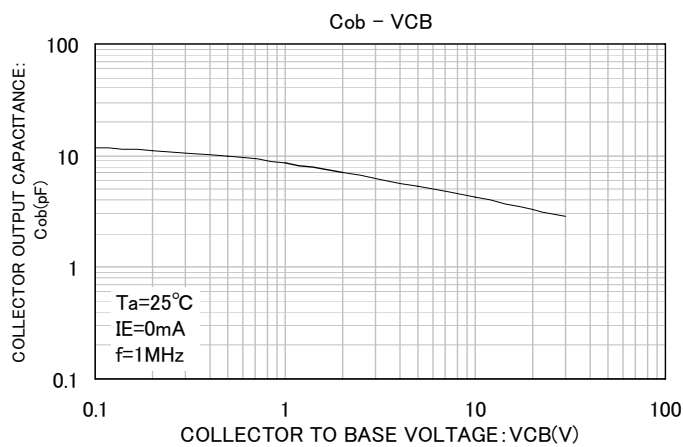
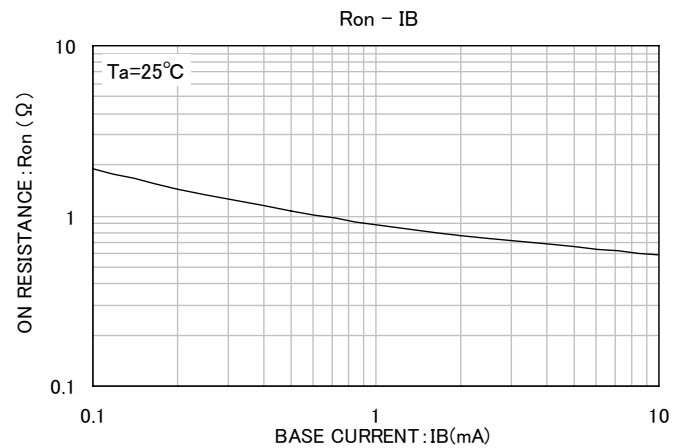
SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=50\mu A, I_E=0mA$	50			V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=50\mu A, I_C=0mA$	50			V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=1mA, R_{BE}=\infty$	20			V
I_{CBO}	Collector cut off current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

TYPICAL CHARACTERISTICS



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