

INC2002AM1-T150

FOR MUTING APPLICATION
Silicon NPN Epitaxial Type

AEC-Q101 Compliance

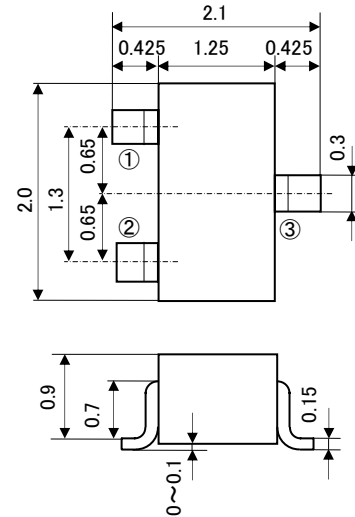
FEATURE

- 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

OUTLINE DRAWING UNIT : mm



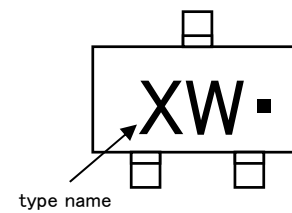
Terminal
Connector

- ①: Base JEITA: SC-70
②: Emitter JEDEC: —
③: Collector

MAXIMUM RATING (Ta=25°C)

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to Base voltage	50	V
V_{CEO}	Collector to Emitter voltage	20	V
V_{EBO}	Emitter to Base voltage	50	V
I_C	Collector current	600	mA
P_C	Collector dissipation	200	mW
T_j	Junction temperature	+150	°C
T_{stg}	Storage temperature	-55~+150	°C

MARKING



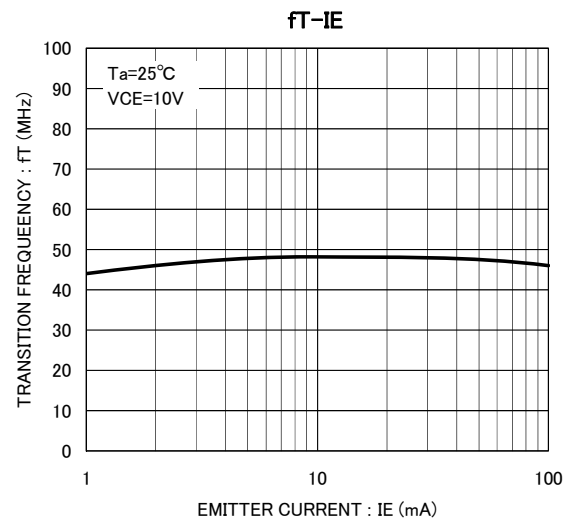
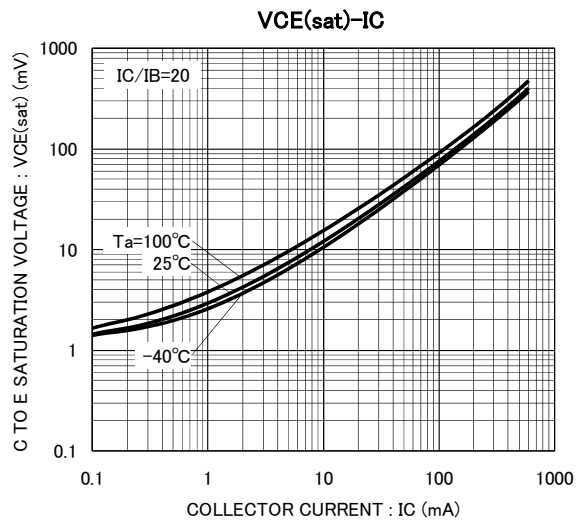
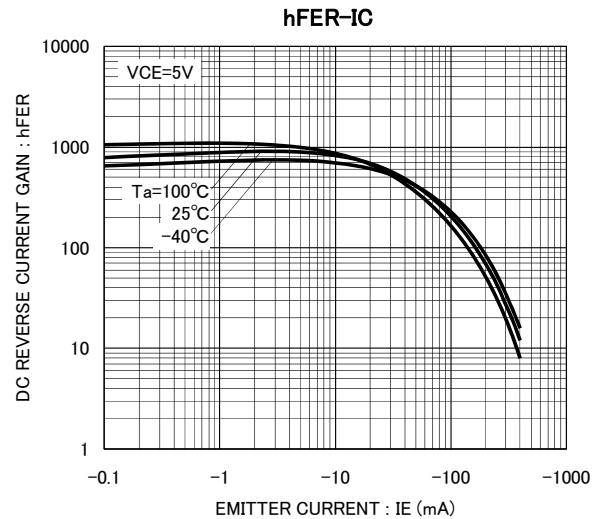
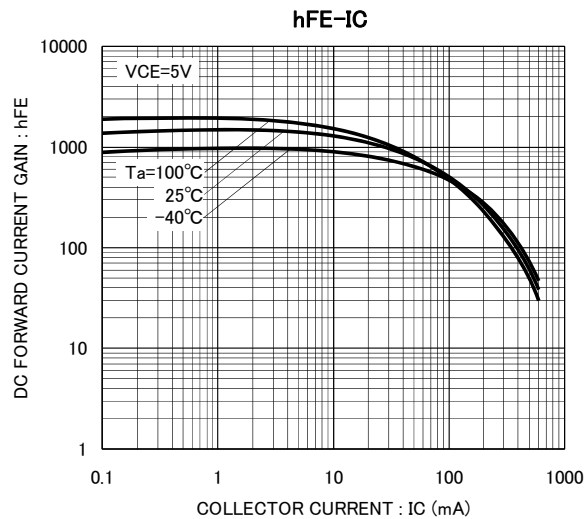
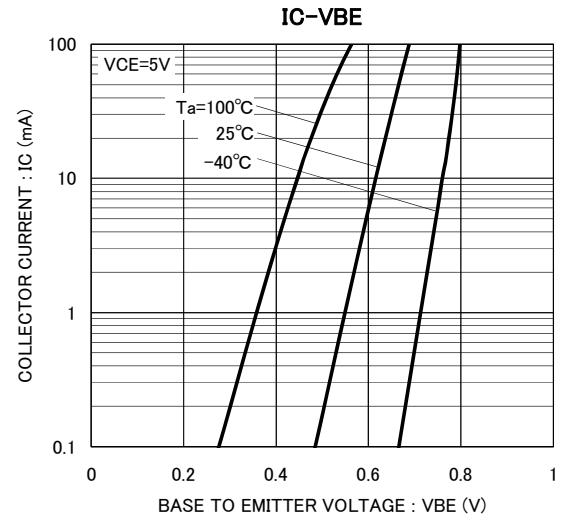
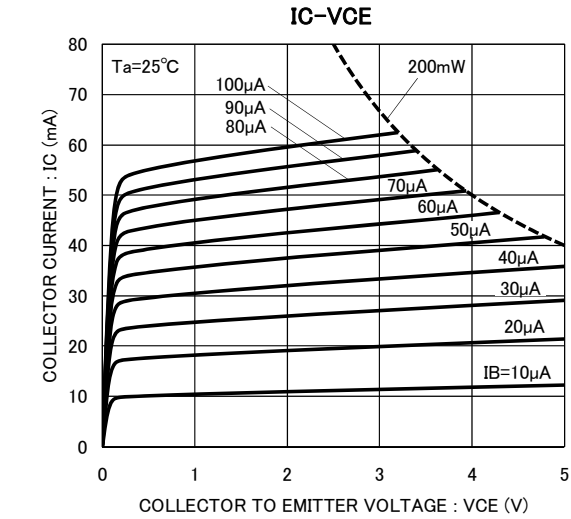
ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	TEST CONDITION	LIMIT			UNIT
			MIN	TYP	MAX	
$V_{(BR)CBO}$	C to B breakdown voltage	$I_C=50\mu A, I_E=0mA$	50	—	—	V
$V_{(BR)CEO}$	C to E breakdown voltage	$I_C=1mA, R_{BE}=\infty$	20	—	—	V
$V_{(BR)EBO}$	E to B breakdown voltage	$I_E=50\mu A, I_C=0mA$	50	—	—	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	$I_B=5mA$	—	0.65	—	Ω

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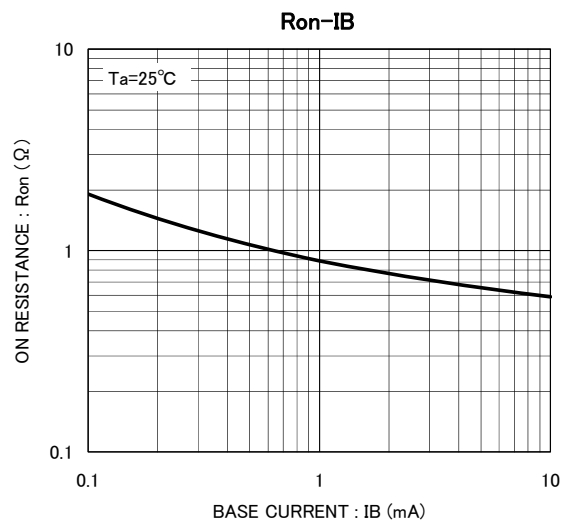
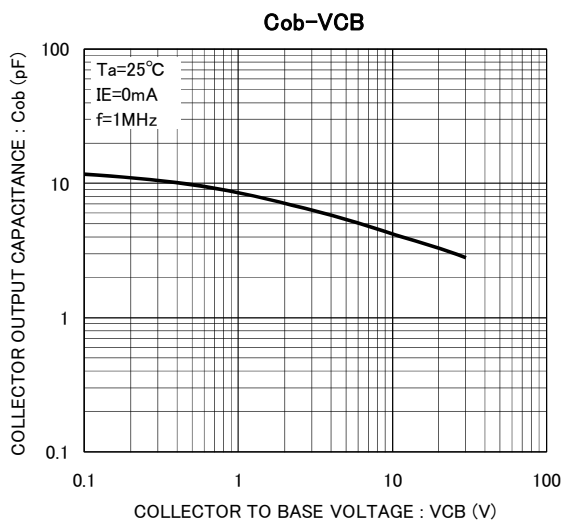
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TYPICAL CHARACTERISTICS



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