〈SMALL-SIGNAL TRANSISTOR〉

2SC5974B

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

ISAHAYA 2SC5974B is a mini package resin sealed silicon NPN epitaxial transistor for muting and switching. application

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FEATURE

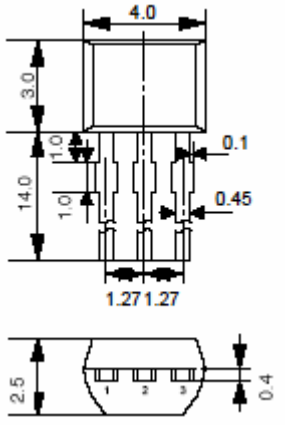
- ●High Emitter to Base voltage VEBO=40V
- ●High Reverse hFE
- ●Low ON RESISTANCE. RON=0.75Ω
- ●Small packege for mounting

APPLICATION

For muting, switching application

OUTLINE DRAWING

Unit:mm



TERMINAL CONNECTER
①:EMITTER
②:COLLECTOR
③:BASE

JEITA:
JEDEC:

MAXIMUM RATINGS (Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	40	V
V_{CEO}	Collector to Emitter voltage	9	V
V_{EBO}	Emitter to Base voltage	40	V
I_O	Collector current	200	mA
P_c	Collector dissipation	450	mW
T_j	Junction temperature	+125	℃
T_{stg}	Storage temperature	−55～+125	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
Collector cut off current	ICBO	V_{CB}=40V, I_E=0mA	−	−	0.1	μA
Emitter cut off current	IEBO	V_{EB}=40V, I_C=0mA	−	−	0.1	μA
DC forward current gain	hFE	V_{CE}=2V, I_C=4mA	700	−	2200	
C to E Saturation Vlotage	VCE(sat)	I_C=30mA ,I_B=3mA	−	25	−	mV
Gain bandwidth product	fT	V_{CE}=6V, I_E=−4mA	−	150	−	MHz
Collector output capacitance	Cob	V_{CB}=10V, I_E=0mA,f=1MHz	−	3.0	−	pF

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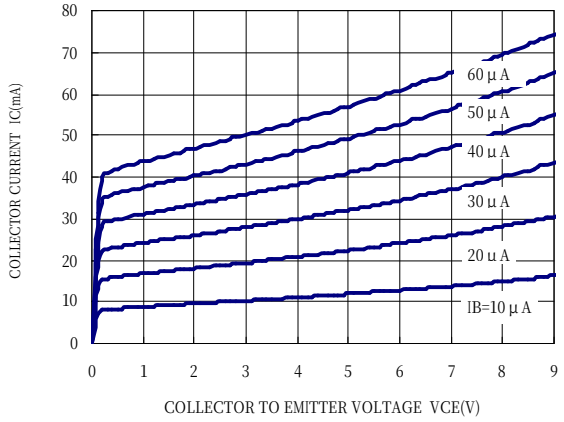
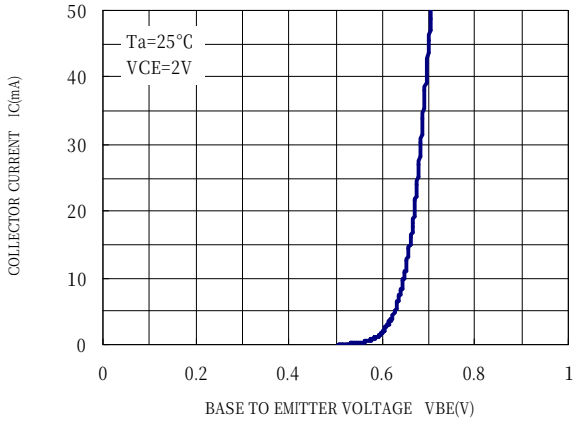
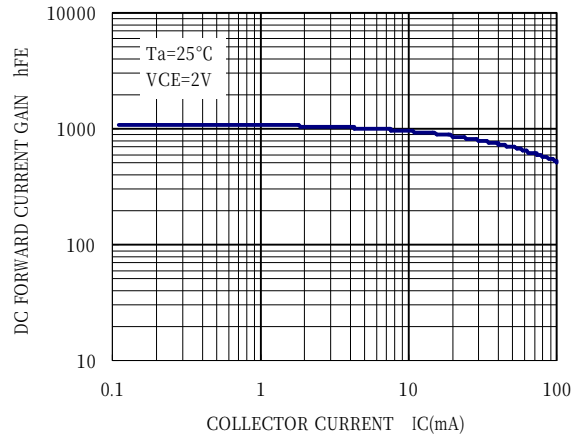
COMMON EMITTER OUTPUT



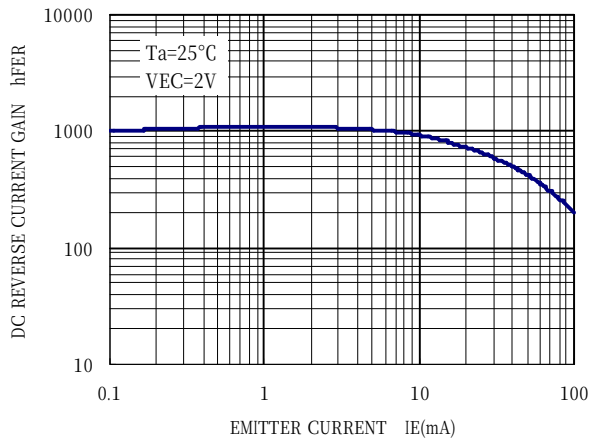
COMMON EMITTER TRANSFER



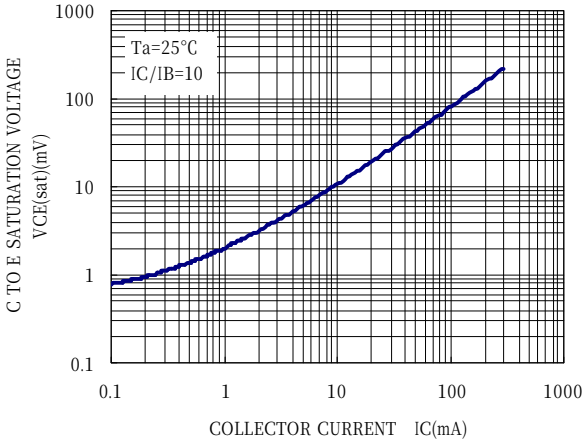
DC FORWARD CURRENT GAIN
VS.COLLECTOR CURRENT



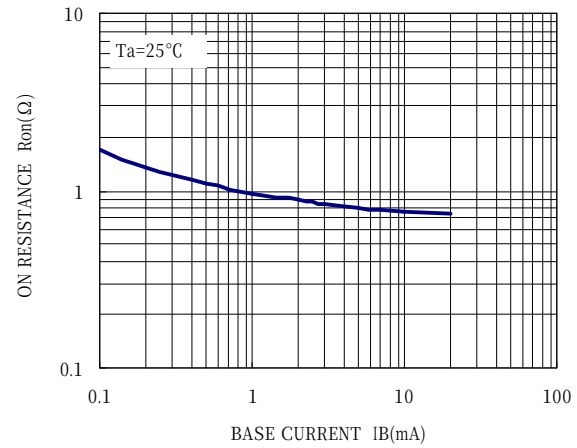
DC REVERSE CURRENT GAIN
VS.COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE
VS, COLLECTOR CURRENT



ON RESISTANCE VS.BASE CURRENT



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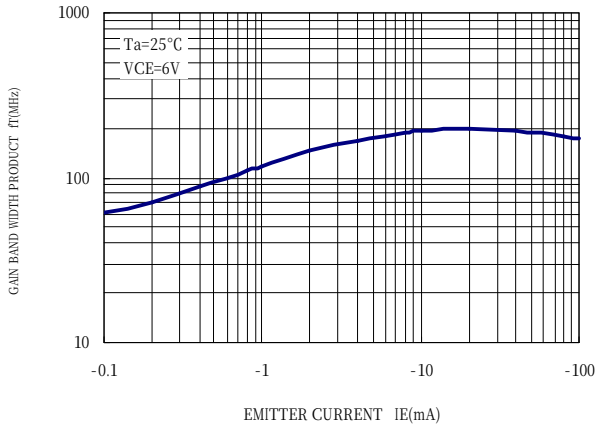
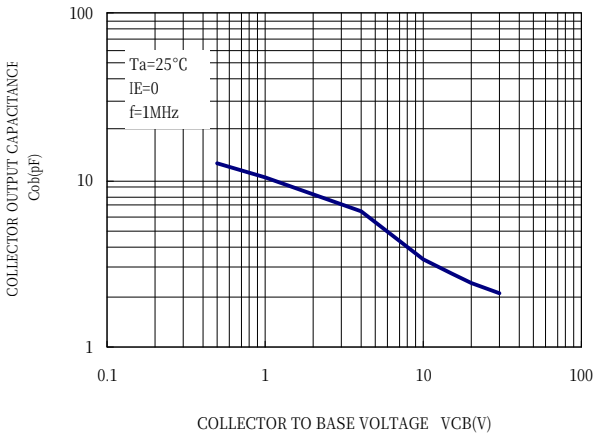
GAIN BAND WIDTH PRODUCT VS.
EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS.COLLECTOR TO BASE VOLTAGE



ISAHAYA ELECTRONICS CORPORATION

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