

2SC5974BFOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE**PRELIMINARY**
Notics: This is not a final specification.
Some parametric limits are subject to
change.**DESCRIPTION**

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

FEATURE

High Emitter to Base voltage $V_{EBO}=40V$

High Reverse hFE

Low ON RESISTANCE. $R_{ON}=0.75$

Small package for mounting

APPLICATION

For muting, switching application

MAXIMUM RATINGS (Ta=25 °C)

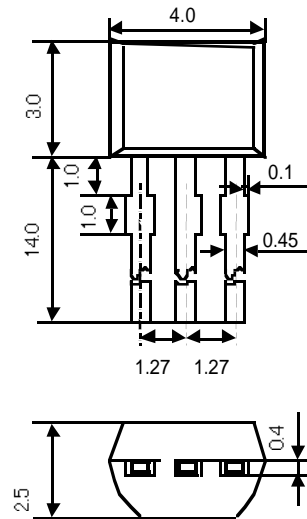
Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	40	V
V_{CEO}	Collector to Emitter voltage	9	V
V_{EBO}	Emitter to Base voltage	40	V
I_C	Collector current	200	mA
P_C	Collector dissipation	450	mW
T_j	Junction temperature	+125	
T_{stg}	Storage temprature	-55 ~ +125	

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

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

OUTLINE DRAWING

Unit:mm

**TERMINAL CONNECTOR**

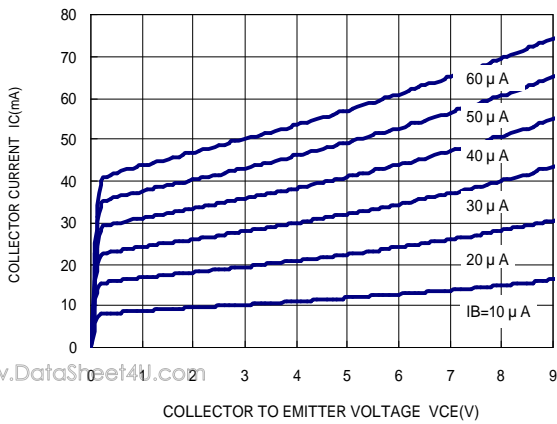
- ① : EMITTER
② : COLLECTOR
③ : BASE

EIJA: -

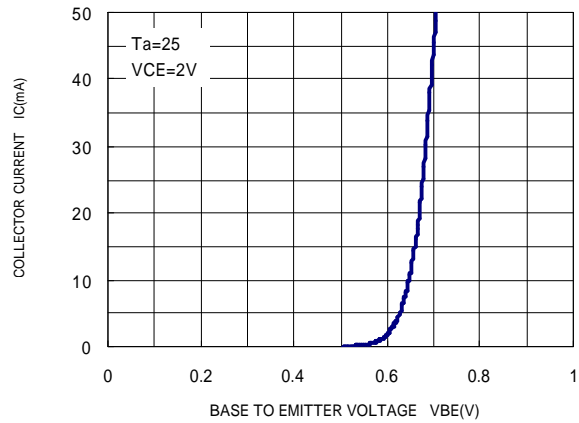
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COMMON EMITTER OUTPUT

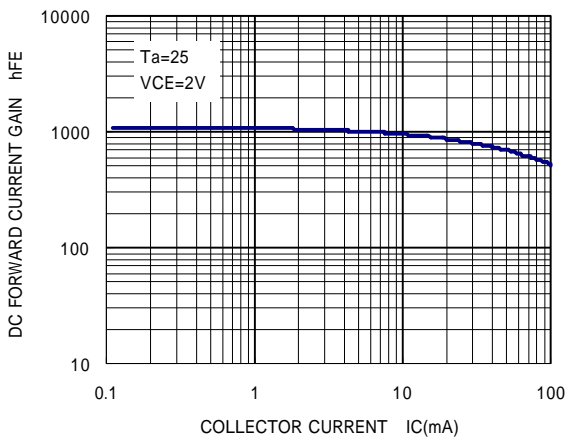


COMMON EMITTER TRANSFER

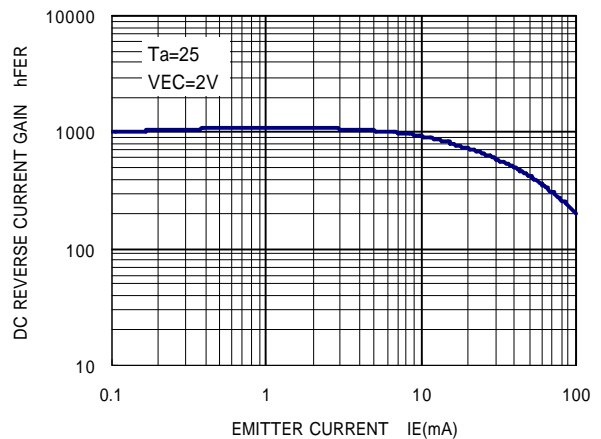


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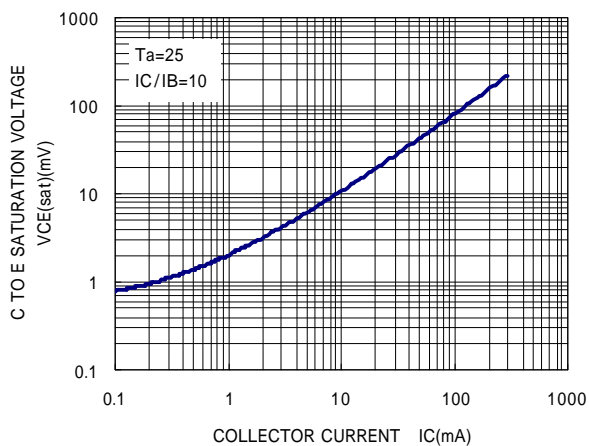
DC FORWARD CURRENT GAIN VS.COLLECTOR CURRENT



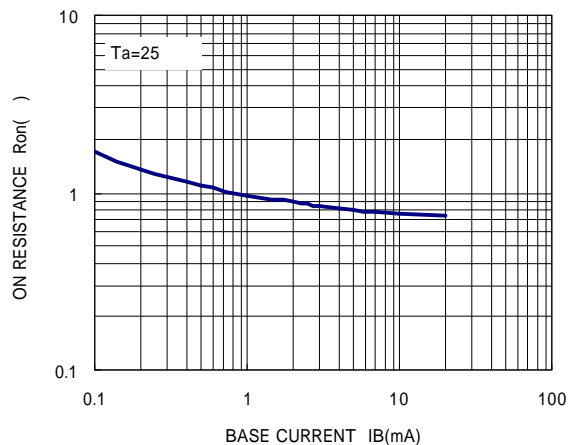
DC REVERSE CURRENT GAIN VS.COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE VS. COLLECTOR CURRENT



ON RESISTANCE VS.BASE CURRENT

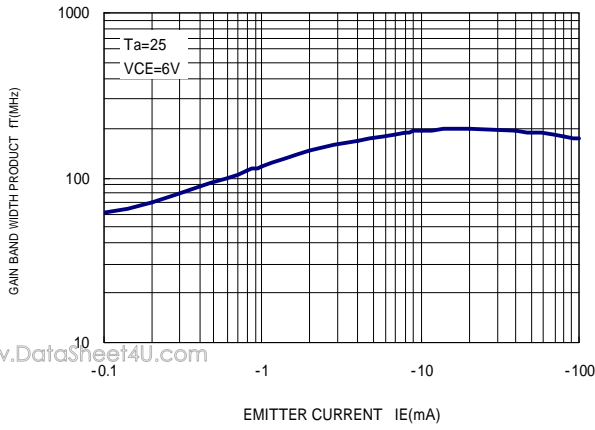


SMALL-SIGNAL TRANSISTOR

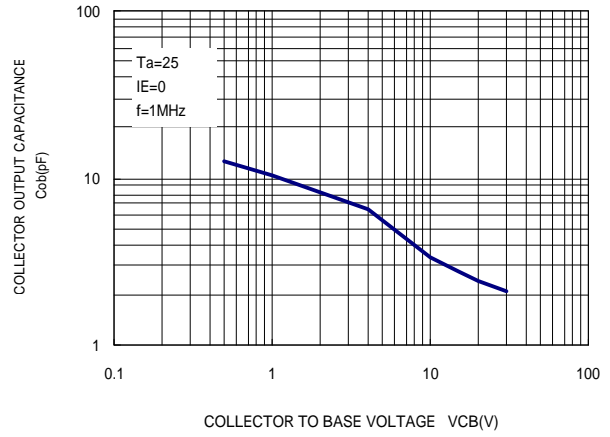
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GAIN BAND WIDTH PRODUCT VS.
EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS. COLLECTOR TO BASE VOLTAGE



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