〈SMALL-SIGNAL TRANSISTOR〉

2SC5996A

FOR LOW FREQUENCY AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

ISAHAYA 2SC5996A is a super mini package resin sealed silicon NPN epitaxial transistor for muting and switching. application

FEATURE

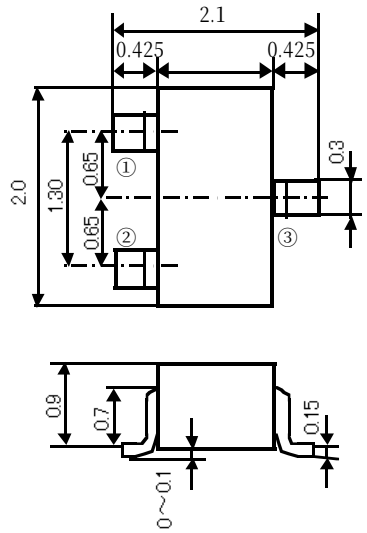
- High Emitter to Base voltage VEBO=40V
- High Reverse hFE
- Low ON RESISTANCE. RON=1Ω
- Small packege for mounting

APPLICATION

For muting, switching application

OUTLINE DRAWING

Unit : mm



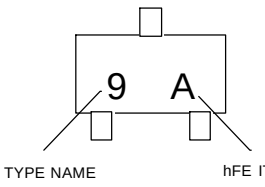
JEITA SC-70

TERMINAL CONNECTOR
① :BASE
② :EMITTER
③ :COLLECTOR

MAXIMUM RATINGS (Ta=25℃)

Symbol	Parameter	Ratings	Unit
VCBO	Collector to Base voltage	50	V
VCEO	Collector to Emitter voltage	20	V
VEBO	Emitter to Base voltage	40	V
I C	Collector current	200	mA
PC	Collector dissipation	150	mW
Tj	Junction temperature	+125	℃
Tstg	Storage temprature	-55 ～ +125	℃

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25℃)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
I CBO	Collector cut off current	VCB=50V, I E=0mA			0.1	μA
I EBO	Emitter cut off current	VEB=40V, IC=0mA			0.1	μA
hFE	DC forward current gain	VCE=2V, I C=4mA	200		1200	
VCE(sat)	C to E saturation voltage	I C=30mA, I B=3mA		30		mV
fT	Gain bandwidth product	VCE=6V, I C=4mA		30		MHz
Cob	Collector output capacitance	VCB=10V, I E=0mA, f=1MHz		5.0		pF

Item	A	B
hFE	200 to 700	350 to 1200
Marking	9A	9B

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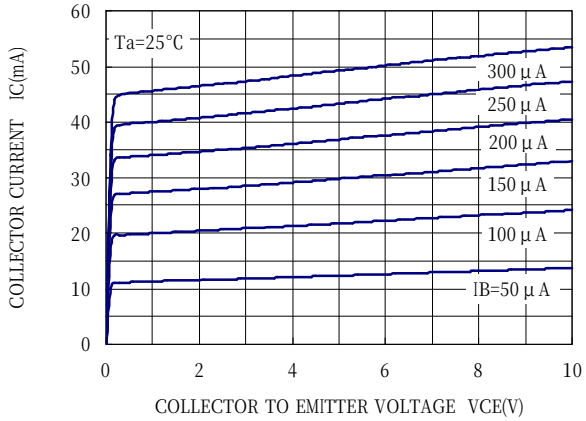
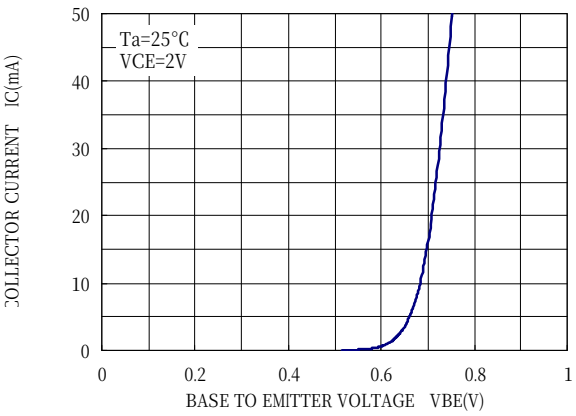
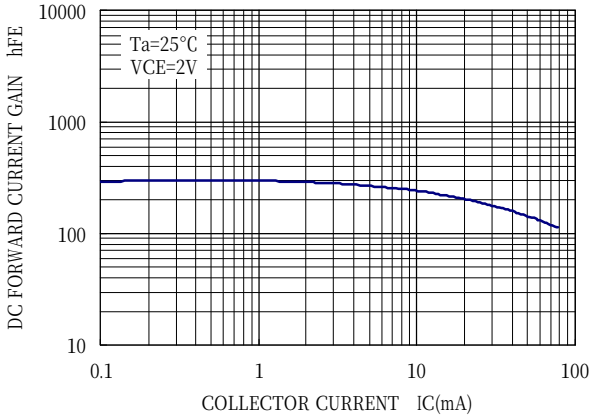
COMMON EMITTER OUTPUT



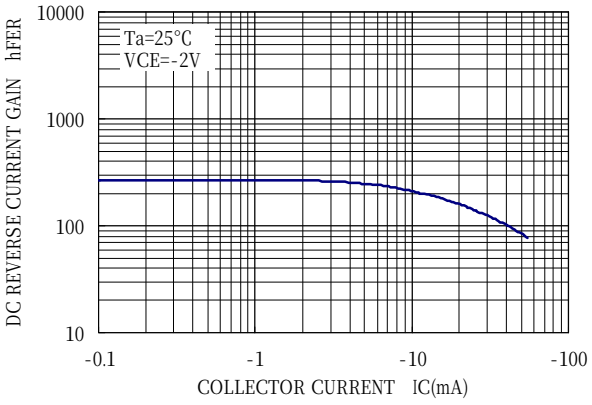
COMMON EMITTER TRANSFER



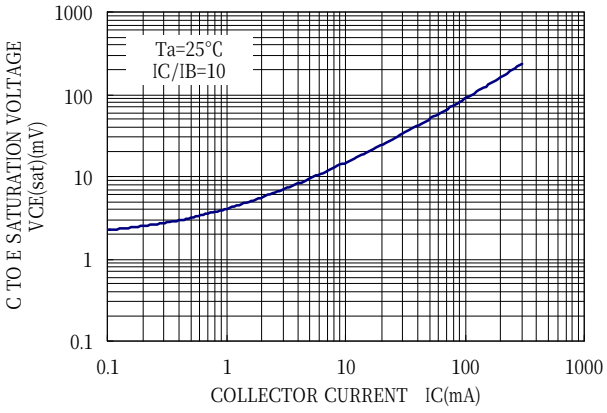
DC FORWARD CURRENT GAIN
VS. COLLECTOR CURRENT



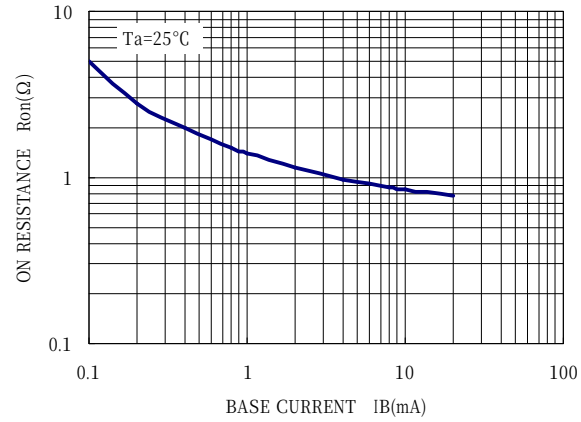
DC REVERSE CURRENT GAIN
VS. COLLECTOR CURRENT



COLLECTOR TO EMITTER SATURATION VOLTAGE
VS. COLLECTOR CURRENT



ON RESISTANCE VS. BASE CURRENT



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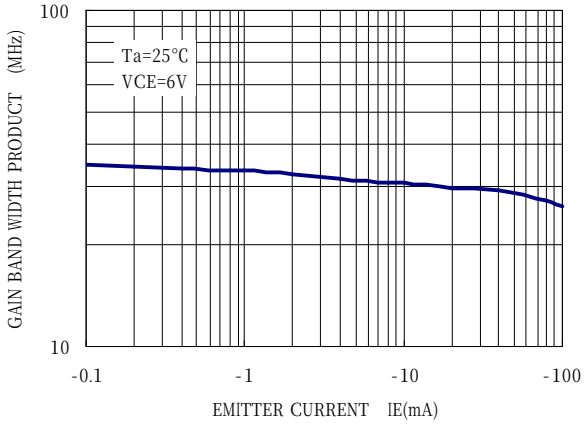
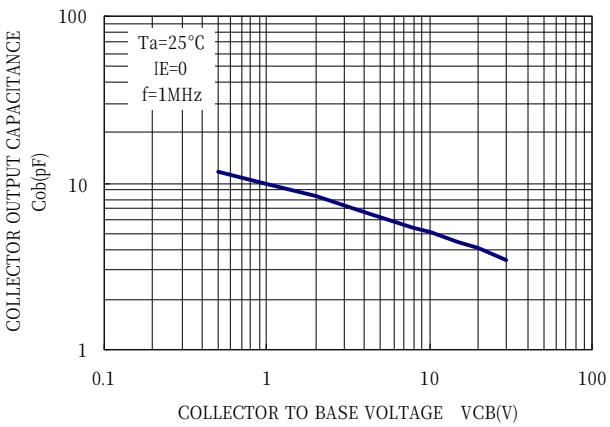
GAIN BAND WIDTH PRODUCT VS.
EMITTER CURRENT



COLLECTOR OUTPUT CAPACITANCE
VS.COLLECTOR TO BASE VOLTAGE



ISAHAYA ELECTRONICS CORPORATION

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Jan.2003