

## Silicon PNP transistor epitaxial type A5951

### [ Applications ]

Low frequency power amplifier

### [ Feature ]

Complementary pair with C5951

### [ Absolute maximum ratings (Ta=25C) ]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-180	V
Collector-emitter voltage	VCEO	-160	V
Emitter-base voltage	VEBO	-5	V
Collector current	IC	-1.5	A
Junction temperature	Tj	150	C
Storage temperature	Tstg	-55 to 150	C

### [ Electrical characteristics (Ta=25C) ]

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BVCBO	-180	-	-	V	IC= -1mA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-160	-	-	V	IC= -10mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-5	-	-	V	IE= -1mA, IC= 0A
Collector cut-off current	ICBO	-	-	-10	uA	VCB= -160V, IE= 0A
DC current gain 1	hFE 1	80	200	360	-	VCE= -5V, IC= -150mA
DC current gain 2	hFE 2	30	-	-	-	VCE= -5V, IC= -500mA
Collector-emitter saturation voltage	VCE(sat)	-	-	-1	V	IC= -500mA, IB= -50mA
Base-emitter saturation voltage	VBE(on)	-	-	-1.5	V	VCE= -5V, IC= -150mA
Transition frequency	fT	-	180	-	MHz	VCE= -5V, IE= 150mA
Collector output capacitance	Cob	-	24	-	pF	VCB= -10V, f = 1MHz, IE= 0A

Notice 1) These are measured data of transistors assembled by PHENITEC SEMICONDUCTOR Corp. and are for reference only.

Notice 2) The contents described herein are subject to change without notice.

No. A5951-20070213

Fig.1 IC - VBE(on)  
at VCE= -5V, Ta= 25C

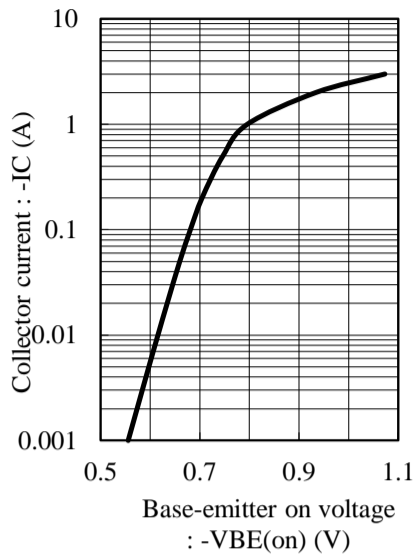


Fig.2 hFE - IC  
at VCE= -5V, Ta= 25C

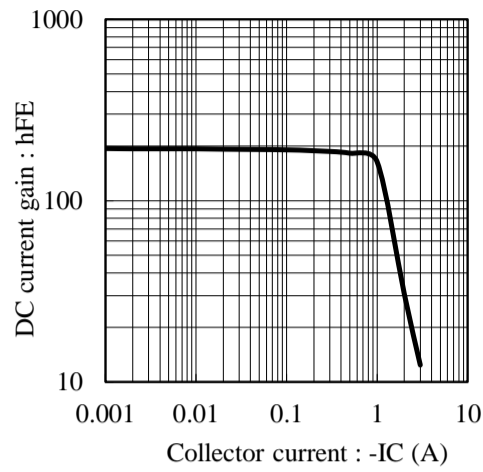


Fig.3 VCE(sat) - IC  
at IC/IB= 10, Ta= 25C

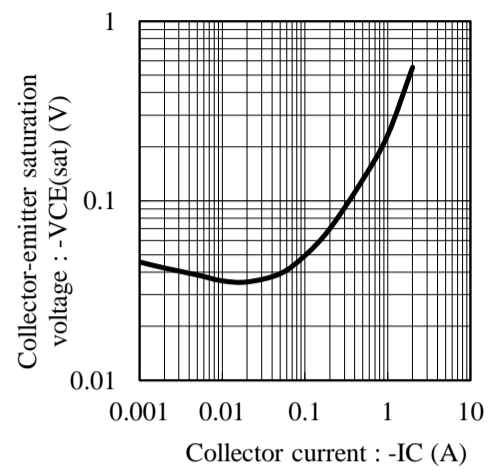


Fig.4 VBE(sat) - IC  
at IC/IB= 10, Ta= 25C

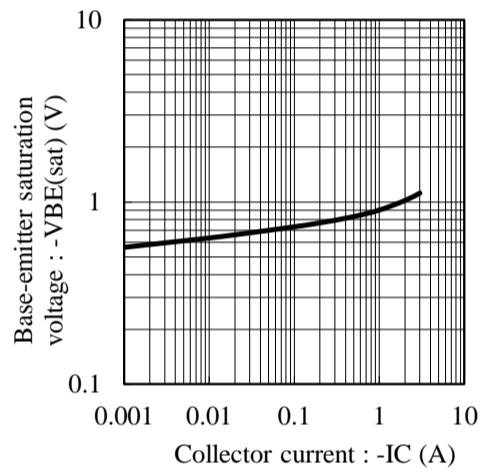


Fig.5 fT - IE  
at VCE= -5V, Ta= 25C

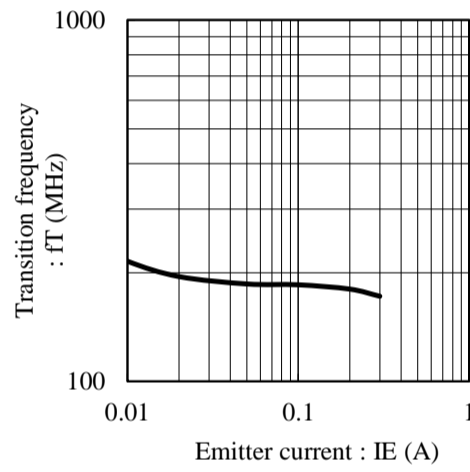


Fig.6 Cob - VCB  
at f= 1MHz, Ta= 25C

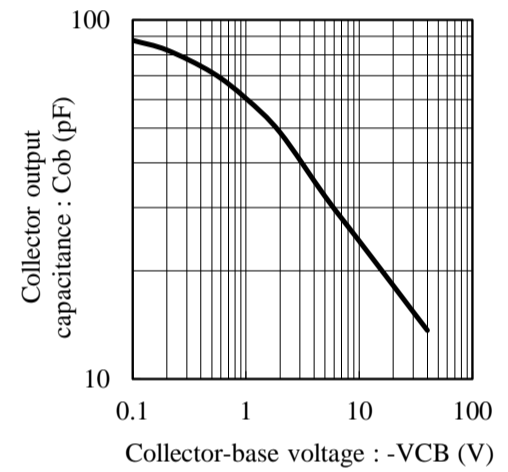


Fig.7 Cib - VEB  
at f= 1MHz, Ta= 25C

