

**Silicon PNP transistor epitaxial type  
A5920**
**[ Applications ]**

Muting and switching with high hFE & low VCE(sat)  
 Low frequency signal amplifire with less power consumption

**[ Feature ]**

High level collector current IC= -500mA  
 High level DC current gain hFE= 270~680  
 Low collector saturation voltage VCE(sat)= -0.1V(Typ.) at IC= -200mA, IB= -10mA

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

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-15	V
Collector-emitter voltage	VCEO	-12	V
Emitter-base voltage	VEBO	-6	V
Collector current	IC	-500	mA
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	-15	-	-	V	IC= -10uA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-12	-	-	V	IC= -1mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-6	-	-	V	IE= -10uA, IC= 0A
Collector cut-off current	ICBO	-	-	-0.1	uA	VCB= -15V, IE= 0A
Emitter cut-off current	IEBO	-	-	-0.1	uA	VEB= -6V, IE= 0A
DC current gain	hFE	270	-	680	-	VCE= -2V, IC= -10mA
Collector-emitter saturation voltage	VCE(sat)	-	-0.1	-0.25	V	IC= -200mA, IB= -10mA
Transition frequency	f T	-	260	-	MHz	VCE= -2V, IE= 10mA
Collector output capacitance	Cob	-	6.5	-	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. A5920-20061102

Fig.1 VBE(on) - IC  
at VCE= -2V, Ta= 25C

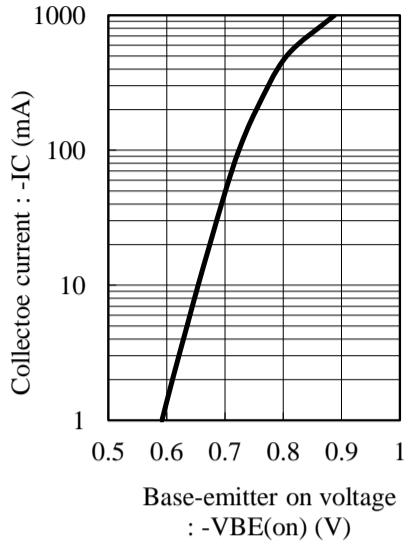


Fig.2 hFE - IC  
at VCE= -2V, Ta= 25C

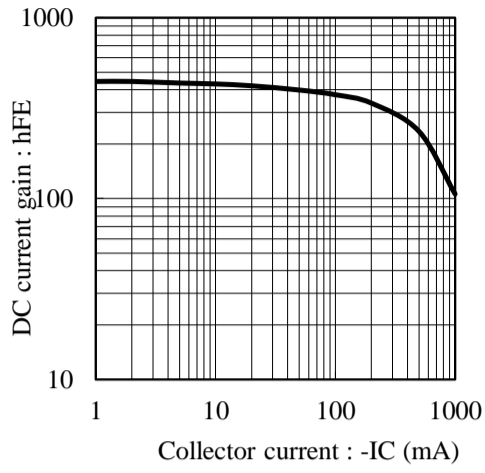


Fig.3 VCE(sat) - IC  
at IC/IB= 20, Ta= 25C

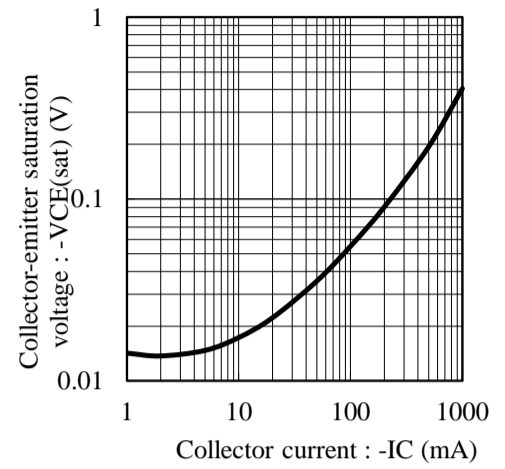


Fig.4 VBE(sat) - IC  
at IC/IB= 20, Ta= 25C

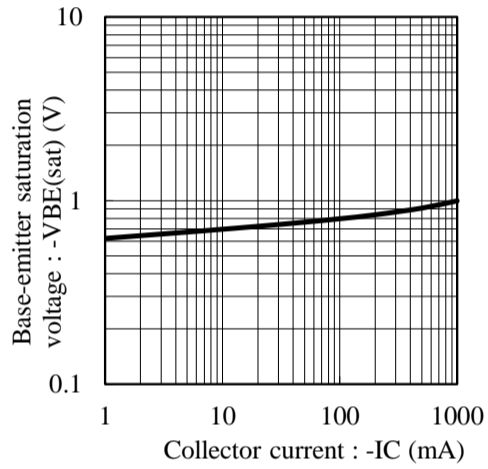


Fig.5 fT - IE  
at VCE= -2V, Ta= 25C

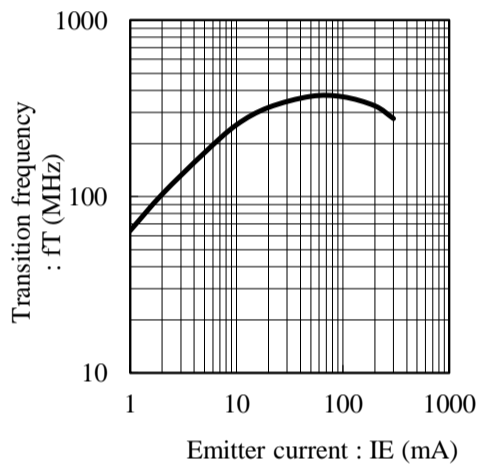


Fig.6 Cob - VCB  
at f= 1MHz, Ta= 25C

