Silicon PNP transistor epitaxial type
B5897

[Applications]

High side switchs
Medium power amplifier
DC-DC converter

[Feature]

Correspond to BCP69
High collector current IC= -1A
Small collector-emitter saturation voltage VCE(sat)= -180mV(Typ.) at IC= -1A, IB= -100mA
Small output capacitance Cob= 18pF(Typ.) at VCB= -10V

[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-32	V
Collector-emitter voltage	VCEO	-20	V
Emitter-base voltage	VEBO	-5	V
Collector current (DC)	IC	-1	A
Collector current (Pulse)	ICP	-2	A
Base current (Pulse)	IBP	-200	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	-32	-	-	V	IC= -10uA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-20	-	-	V	IC= -1mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-5	-	-	V	IE= -10uA, IC= 0A
Collector cut-off current	ICBO	-	-	-100	nA	VCB= -25V, IE= 0A
Emitter cut-off current	IEBO	-	-	-100	nA	VEB= -5V, IE= 0A
DC current gain 1	hFE 1	50	-	-	-	VCE= -10V, IC= -5mA
DC current gain 2	hFE 2	85	175	375	-	VCE= -1V, IC= -500mA
DC current gain 3	hFE 3	60	-	-	-	VCE= -1V, IC= -1A
Collector-emitter saturation voltage	VCE(sat)	-	-180	-500	mV	IC= -1A, IB= -100mA
Base-emitter on voltage 1	VBE(on) 1	-	-	-700	mV	VCE= -10V, IC= -5mA
Base-emitter on voltage 2	VBE(on) 2	-	-	-1	V	VCE= -1V, IC= -1A
Transition frequency	f T	40	140	-	MHz	VCE= -5V, IE= 50mA
Collector output capacitance	Cob	-	18	-	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.

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

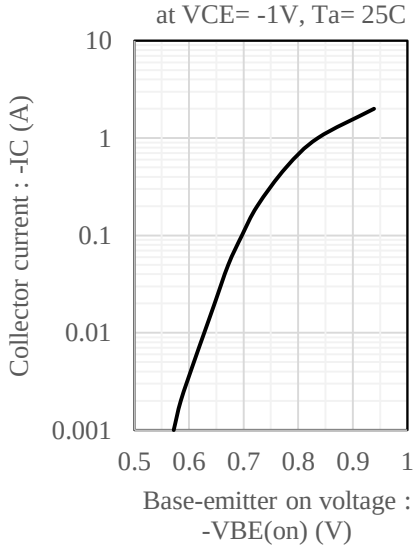

Fig.2 VBE(on) - IC
at VCE= -10V, Ta= 25C

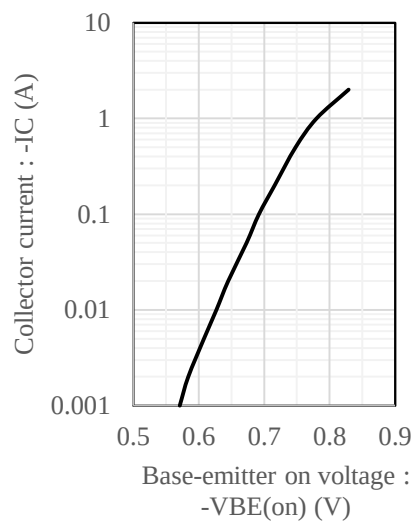

Fig.3 hFE - IC
at VCE= -1V, Ta= 25C

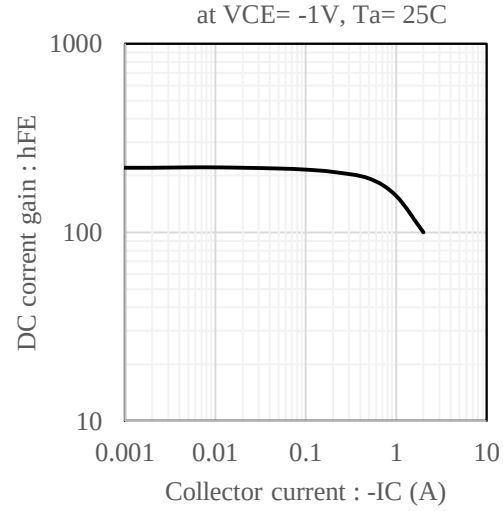

Fig.4 VCE(sat) - IC
at IC/IB= 10, Ta= 25C

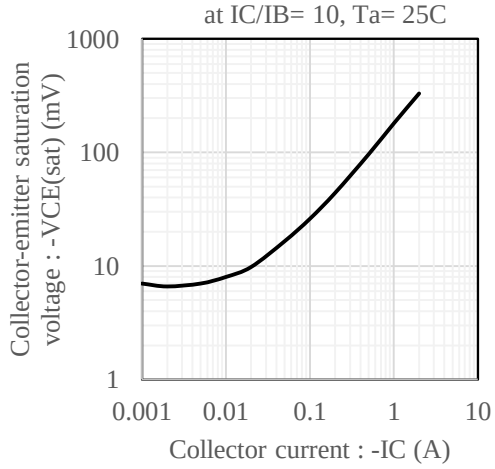

Fig.5 fT - IE
at VCE= -5V, Ta= 25C

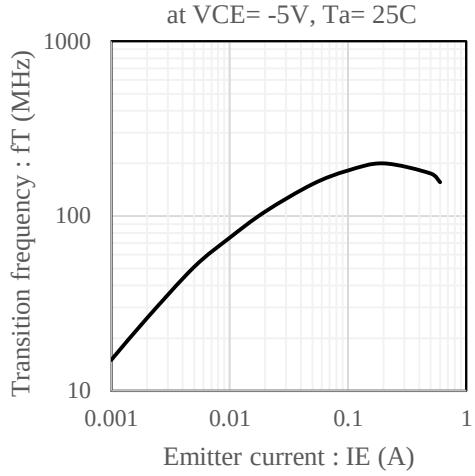

Fig.6 Cob - VCB
at f= 1MHz, Ta= 25C