Silicon PNP transistor epitaxial type
BP005

[Applications]
General purpose

[Feature]
Low collector saturation voltage VCE(sat)= -0.25V(Max.) at IC= -100mA, IB= -10mA

[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-80	V
Collector-emitter voltage	VCEO	-80	V
Emitter-base voltage	VEBO	-4	V
Collector current	IC	-200	mA
Junction temperature	Tj	125	C
Storage temperature	Tstg	-55 to 125	C

[Electrical characteristics (Ta=25C)]

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BVCBO	-80	-	-	V	IC= -100uA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-80	-	-	V	IC= -1mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-4	-	-	V	IE= -100uA, IC= 0A
Collector cutoff current	ICBO	-	-	-100	nA	VCB= -80V
Collector cutoff current	ICEO	-	-	-100	nA	VCE= -60V
DC current gain 1	hFE 1	100	-	-	-	VCE= -1V, IC= -10mA
DC current gain 2	hFE 2	100	-	-	-	VCE= -1V, IC= -100mA
Collector-emitter saturation voltage	VCE(sat)	-	-	-0.25	V	IC= -100mA, IB= -10mA
Base-emitter on voltage	VBE(on)	-	-	-1.2	V	VCE= -1V, IC= -100mA
Transition frequency	fT	50	-	-	MHz	VCE= -1V, IE= 100mA

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

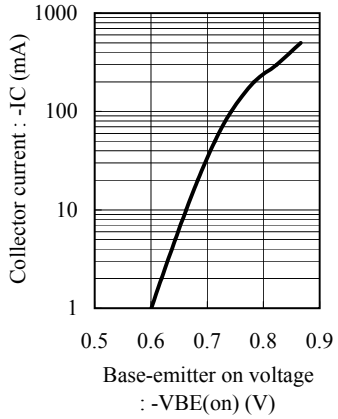

Fig.2 hFE - IC
at VCE= -1V, Ta= 25C

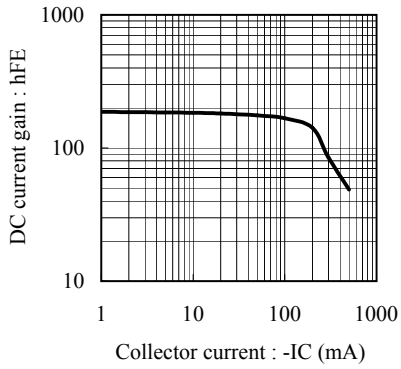

Fig.3 VCE(sat) - IC
at IC/IB= 10, Ta= 25C

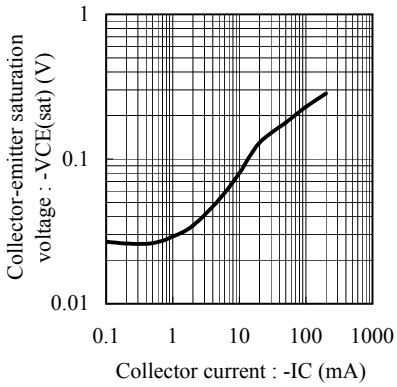

Fig.4 VBE(sat) - IC
at IC/IB= 10, Ta= 25C

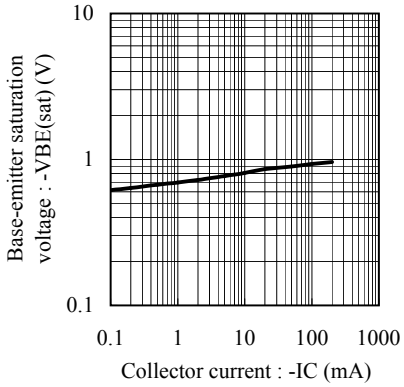

Fig.5 fT - IE
at VCE= -1V, Ta= 25C

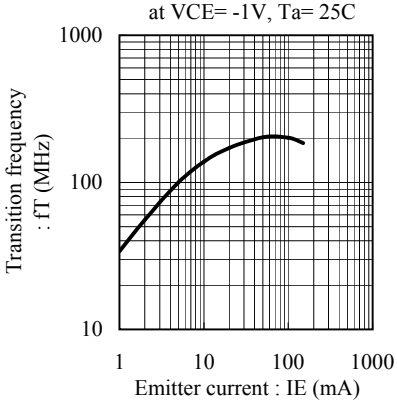

Fig.6 Cob - VCB
at f= 1MHz, Ta= 25C

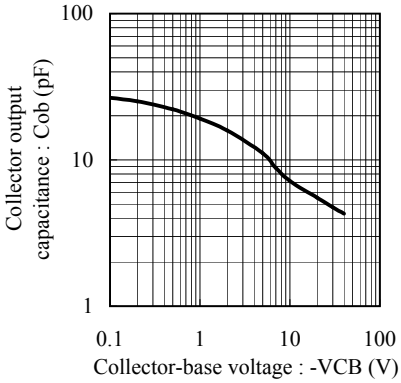

Fig.7 Cib - VEB
at f= 1MHz, Ta= 25C