Silicon PNP transistor epitaxial type
A5985

[Applications]
General purpose amplifier

[Feature]
Very low collector saturation voltage VCE(sat)= -0.6V (Max.) at IC= -1A, IB= -100mA
NPN complementary pair with C5985

[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-80	V
Collector-emitter voltage	VCEO	-60	V
Emitter-base voltage	VEBO	-5	V
Collector current (DC)	IC	-1	A
Collector current (Pulse)	IC	-2	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	-80	-	-	V	IC= -100uA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-60	-	-	V	IC= -10mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-5	-	-	V	IE= -100uA, IC= 0A
Collector cut-off current	ICBO	-	-	-100	nA	VCB= -60V, IE= 0A
Collector cut-off current	ICES	-	-	-100	nA	VCES= -60V
Emitter cut-off current	IEBO	-	-	-100	nA	VEB= -4V, IC= 0A
DC current gain 1	hFE 1	130	-	-	-	VCE= -5V, IC= -1mA
DC current gain 2	hFE 2	130	-	300	-	VCE= -5V, IC= -500mA
DC current gain 3	hFE 3	80	-	-	-	VCE= -5V, IC= -1A
DC current gain 4	hFE 4	15	-	-	-	VCE= -5V, IC= -2A
Collector-emitter saturation voltage 1	VCE(sat) 1	-	-	-0.3	V	IC= -500mA, IB= -50mA
Collector-emitter saturation voltage 2	VCE(sat) 2	-	-	-0.6	V	IC= -1A, IB= -100mA
Base-emitter saturation voltage	VBE(sat)	-	-	-1.2	V	IC= -1A, IB= -100mA
Base-emitter on voltage	VBE(on)	-	-	-1.0	V	VCE= -5V, IC= -1A
Transition frequency	fT	150	-	-	MHz	VCE= -10V, IE= 50mA
Collector output capacitance	Cob	-	-	12	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 IC - VBE(on)
at VCE= -5V, Ta= 25C

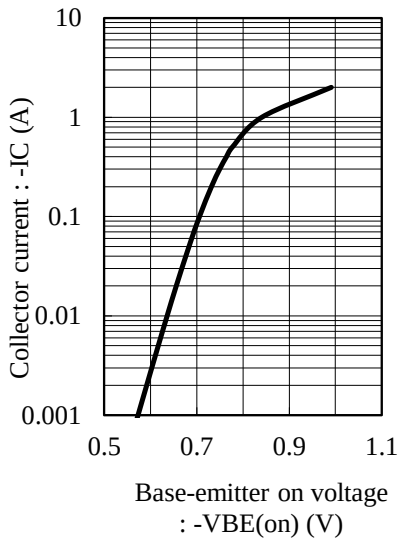

Fig.2 hFE - IC
at VCE= -5V, Ta= 25C

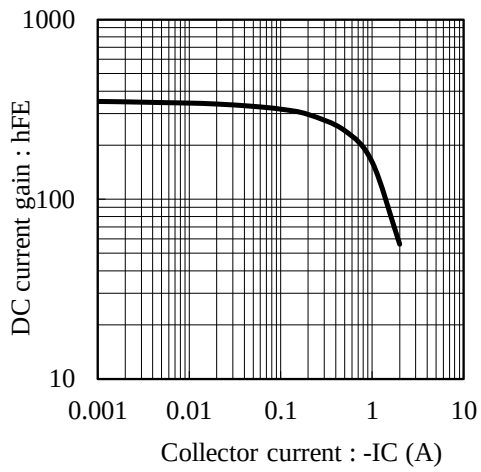

Fig.3 VCE(sat) - IC
at IC/IB= 10, Ta= 25C

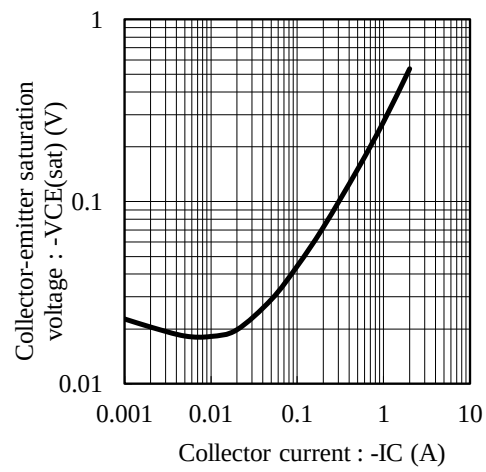

Fig.4 VBE(sat) - IC
at IC/IB= 10, Ta= 25C

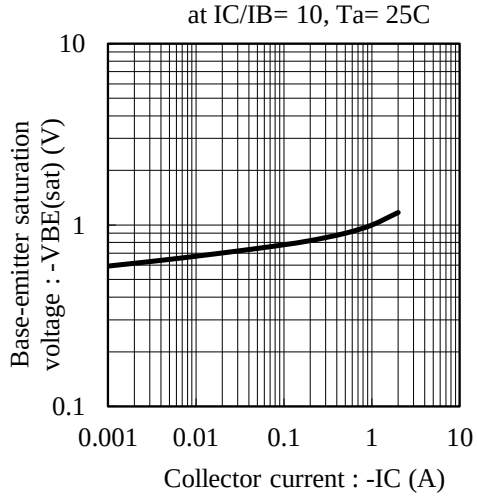

Fig.5 fT - IE
at VCE= -10V, Ta= 25C

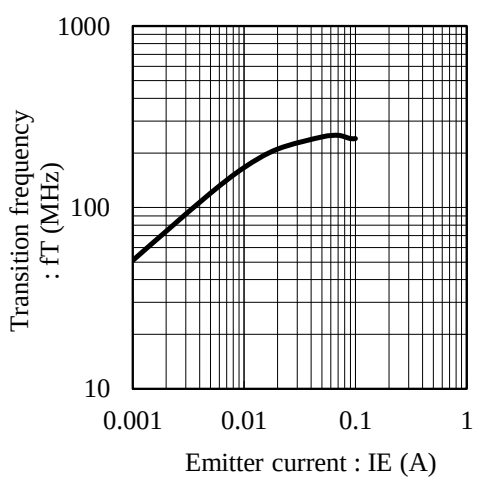

Fig.6 Cob - VCB
at f= 1MHz, Ta= 25C

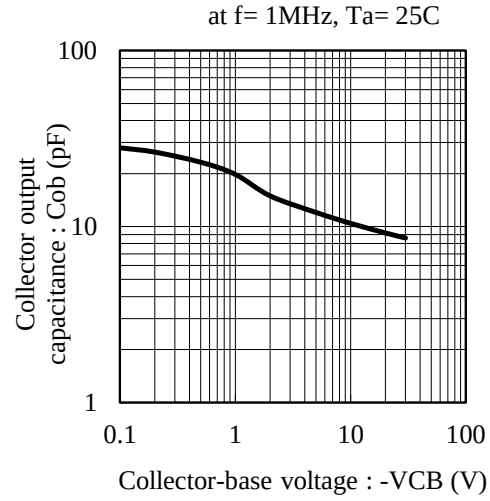

Fig.7 Cib - VEB
at f= 1MHz, Ta= 25C