Silicon PNP transistor triple diffused type
AP925

[Applications]

High voltage switching and amplifier

[Feature]

High voltage VCEO= -600V
High speed switching tf< 0.5us at VCC= -250V, IC= -0.5A

[Absolute Maximum ratings (Ta= 25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-600	V
Collector-emitter voltage	VCEO	-600	V
Emitter-base voltage	VEBO	-7	V
Collector current (DC)	IC	-1	A
Collector current (Pulse)*	ICP	-2	A
Junction temperature	Tj	150	C
Storage temperature	Tstg	-55 to 150	C

*Single pulse width<=10ms

[Electrical characteristics (Ta= 25C)]

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BVCBO	-600	-	-	V	IC= -100uA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-600	-	-	V	IC= -1mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-7	-	-	V	IE= -10uA, IC= 0A
Collector cut-off current	ICBO	-	-	-10	uA	VCB= -600V, IE= 0A
Emitter cut-off current	IEBO	-	-	-10	uA	VEB= -7V, IC= 0A
DC current gain 1	hFE1	30	-	120	-	VCE= -5V, IC= -0.1A
DC current gain 2	hFE2	5	-	-	-	VCE= -5V, IC= -0.5A
Collector-emitter saturation voltage	VCE(sat)	-	-	-1	V	IC= -0.3A, IB= -60mA
Base-emitter saturation voltage	VBE(sat)	-	-	-1.2	V	IC= -0.3A, IB= -60mA
Transition frequency	fT	-	25	-	MHz	VCE= -10V, IE= 50mA
Collector output capacitance	Cob	-	40	-	pF	VCB= -10V, f = 1MHz, IE= 0A
Turn-on time	ton	-	-	0.5	us	VCC= -250V, IC= -0.5A
Storage time	tstg	-	-	5	us	IB1= -IB2= -0.1A
Fall time	tf	-	-	0.5	us	

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= -5V, Ta= 25C

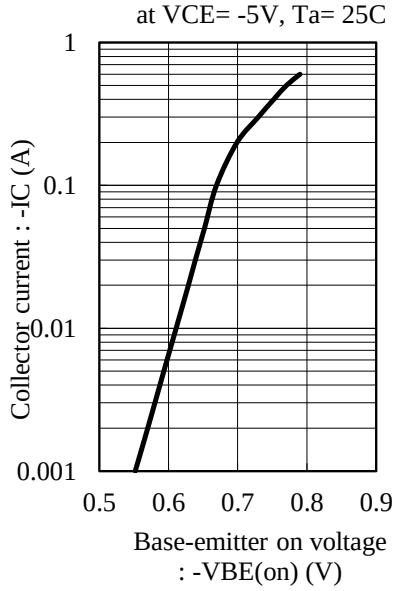

Fig.2 hFE - IC
at VCE= -5V, Ta= 25C

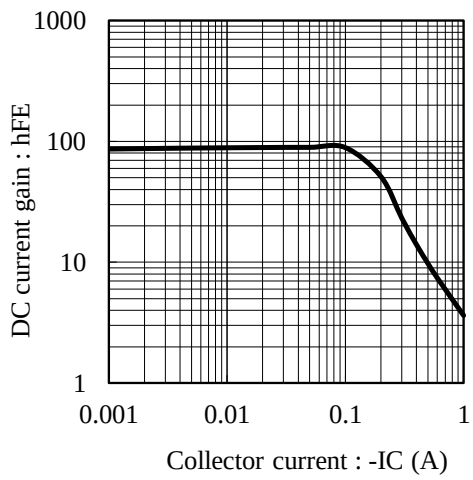

Fig.3 VCE(sat) - IC
at IC/IB= 5, Ta= 25C

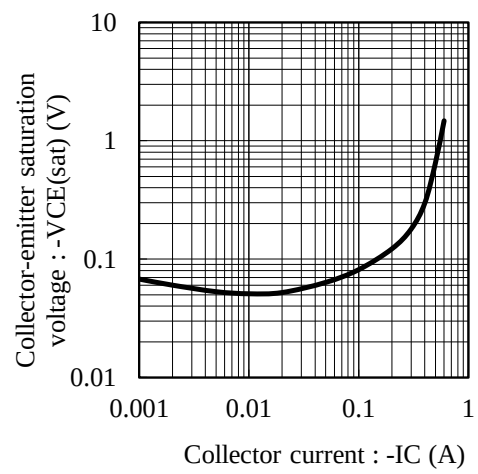

Fig.4 VBE(sat) - IC
at IC/IB= 5, Ta= 25C

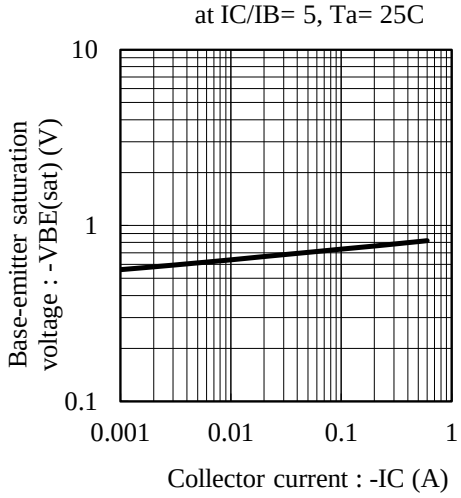

Fig.5 fT - IE
at VCE= -10V, Ta= 25C

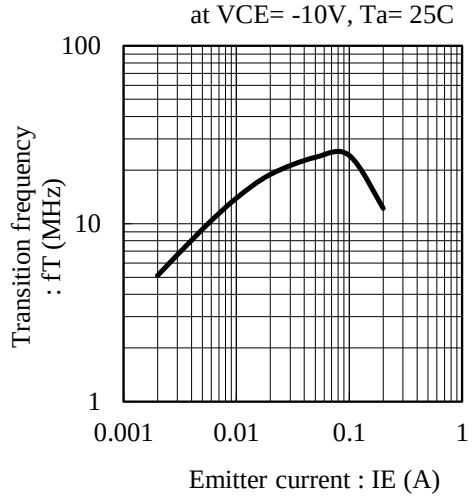

Fig.6 Cob - VCB
at f= 1MHz, Ta= 25C

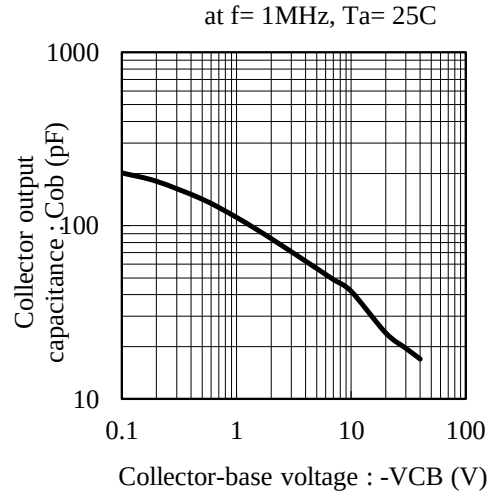

Fig.7 Cib - VEB
at f= 1MHz, Ta= 25C