

Silicon PNP transistor triple diffused type AP925T

[Applications]

High voltage amplifier

[Feature]

High voltage VCEO= -600V

[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)*	IP	-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
Collector-emitter breakdown voltage	BVCEO	-600	-	-	V	IC= -1mA
Emitter-base breakdown voltage	BVEBO	-7	-	-	V	IE= -100uA
Collector cut-off current	ICBO	-	-	-500	nA	VCB= -600V
Collector cut-off current	ICES	-	-	-500	nA	VCES= -600V
Emitter cut-off current	IEBO	-	-	-500	nA	VEB= -7V
DC current gain 1	hFE1	70	-	500	-	VCE= -5V, IC= -1mA
DC current gain 2	hFE2	95	-	410	-	VCE= -5V, IC= -50mA
Collector-emitter saturation voltage	VCE(sat)	-	-	-1.05	V	IC= -0.1A, IB= -10mA
Base-emitter saturation voltage	VBE(sat)	-	-	-0.9	V	IC= -0.1A, IB= -10mA
Transition frequency	fT	-	30	-	MHz	VCE= -10V, IE= 50mA
Collector output capacitance	Cob	-	40	-	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= -5V, Ta= 25C

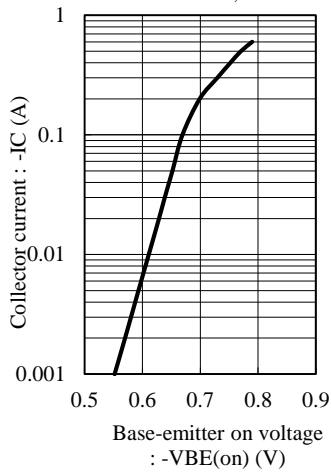


Fig.2 hFE - IC
at VCE= -5V, Ta= 25C

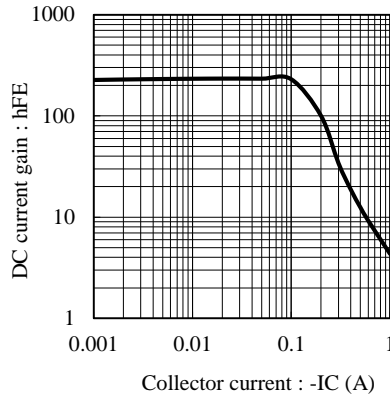


Fig.3 VCE(sat) - IC
at IC/IB= 5, Ta= 25C

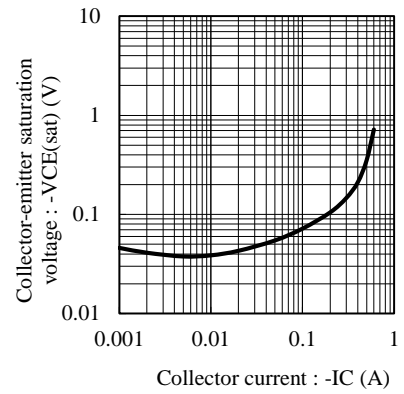


Fig.4 VBE(sat) - IC
at IC/IB= 5, Ta= 25C

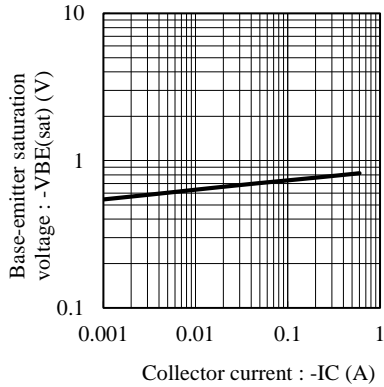


Fig.5 fT - IE
at VCE= -10V, Ta= 25C

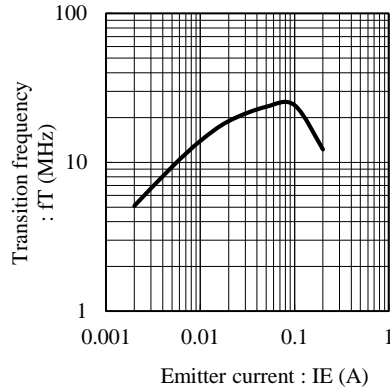


Fig.6 Cob - VCB
at f= 1MHz, Ta= 25C

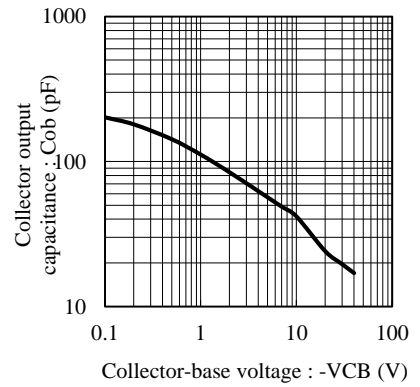


Fig.7 Cib - VEB
at f= 1MHz, Ta= 25C

