Silicon PNP transistor epitaxial type
A5975

[Applications]

Switching and low frequency signal amplifier

[Feature]

High level collector current IC= -500mA
High level collector emitter breakdown voltage BVCEO= -60V
Low collector saturation voltage VCE(sat)= -0.4V(Max.) at IC= -150mA, IB= -15mA

[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-60	V
Collector-emitter voltage	VCEO	-60	V
Emitter-base voltage	VEBO	-5	V
Collector current	IC	-500	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	-60	-	-	V	IC= -10uA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-60	-	-	V	IC= -1mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-5	-	-	V	IE= -10uA, IC= 0A
Collector cut-off current	ICBO	-	-	-0.1	uA	VCB= -50V, IE= 0A
Emitter cut-off current	IEBO	-	-	-0.1	uA	VEB= -3V, IE= 0A
DC current gain	hFE	100	-	300	-	VCE= -10V, IC= -150mA
Collector-emitter saturation voltage	VCE(sat)	-	-	-0.4	V	IC= -150mA, IB= -15mA
Base-emitter saturation voltage	VBE(sat)	-	-	-1.3	V	IC= -150mA, IB= -15mA
Transition frequency	fT	200	-	-	MHz	VCE= -20V, IE= 50mA
Collector output capacitance	Cob	-	-	10	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= -10V, Ta= 25C

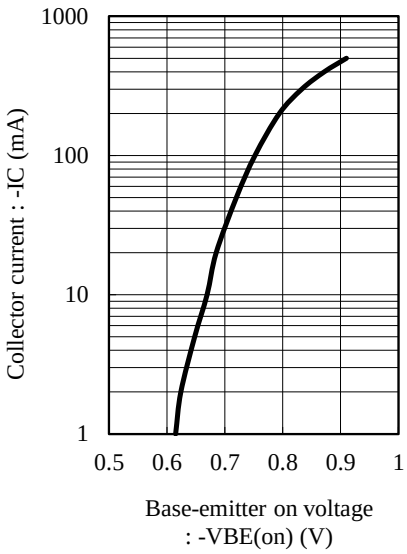

Fig.2 hFE - IC
at VCE= -10V, Ta= 25C

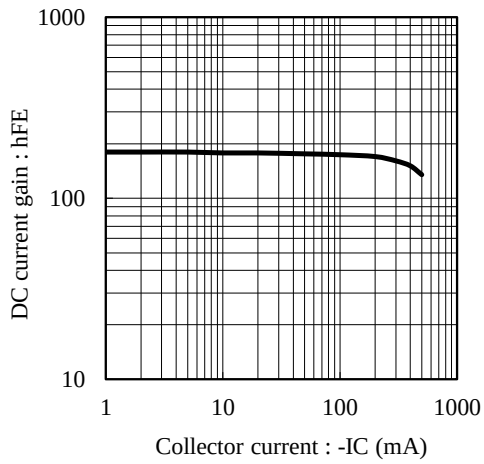

Fig.3 VCE(sat) - IC
at IC/IB= 10, Ta= 25C

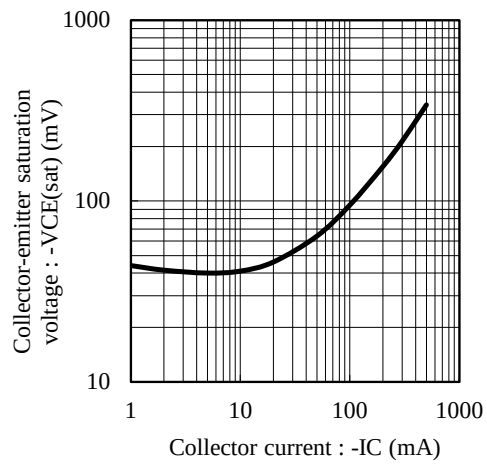

Fig.4 VBE(sat) - IC
at IC/IB= 10, Ta= 25C

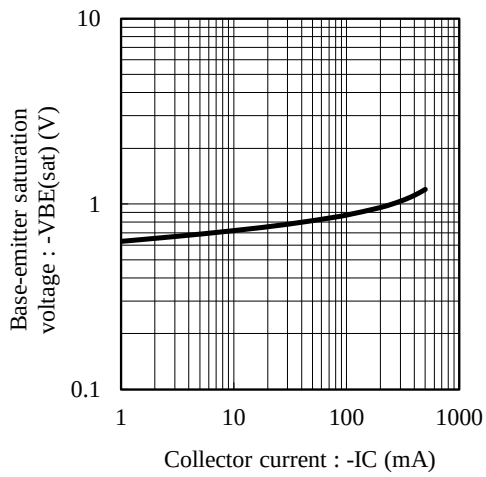

Fig.5 fT - IE
at VCE= -20V, Ta= 25C

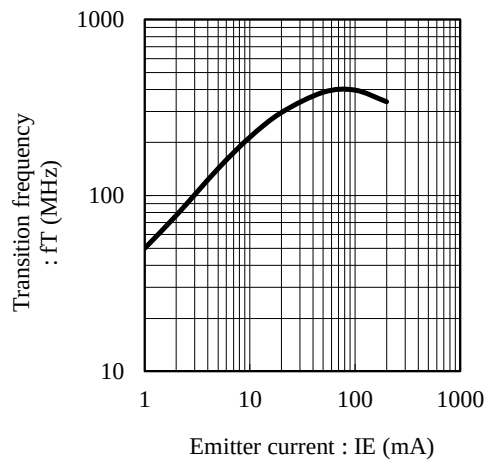

Fig.6 Cob - VCB
at f= 1MHz, Ta= 25C