Silicon PNP transistor epitaxial type
A5836

[Applications]

General purpose transistors
Low frequency signal amplifire

[Feature]

Collector-emitter high break-down voltage BVCEO= -50V
Emitter-base high break-down voltage BVEBO= -8V
High level collector current IC= -500mA
Low collector saturation voltage VCE(sat)= -0.13V(Typ.) at IC= -150mA, IB= -15mA
Complementary pair with Phenitec P/N C5836

[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-50	V
Collector-emitter voltage	VCEO	-50	V
Emitter-base voltage	VEBO	-8	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	-50	-	-	V	IC= -10uA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-50	-	-	V	IC= -10mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-8	-	-	V	IE= -10uA, IC= 0A
Collector cut-off current	ICBO	-	-	-0.5	uA	VCB= -20V, IE= 0A
Emitter cut-off current	IEBO	-	-	-0.5	uA	VEB= -5V, IE= 0A
DC current gain 1	hFE1	68	-	330	-	VCE= -3V, IC= -10mA
DC current gain 2 *	hFE2	10	-	-	-	VCE= -3V, IC= -500mA
Collector-emitter saturation voltage	VCE(sat)	-	-0.13	-0.55	V	IC= -150mA, IB= -15mA
Base-emitter on voltage	VBE(on)	-	-0.64	-	V	VCE= -3V, IC= -10mA
Transition frequency	fT	-	230	-	MHz	VCE= -5V, IE= 50mA
Collector output capacitance	Cob	-	5	12	pF	VCB= -10V, f = 1MHz, IE= 0A

*Pulse

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= -3V, Ta= 25C

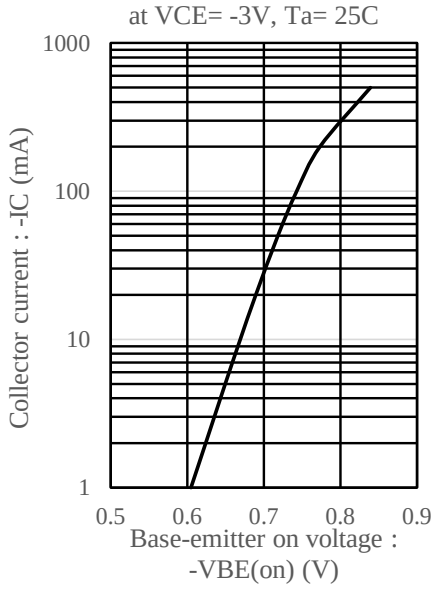

Fig.2 hFE - IC
at VCE= -3V, Ta= 25C

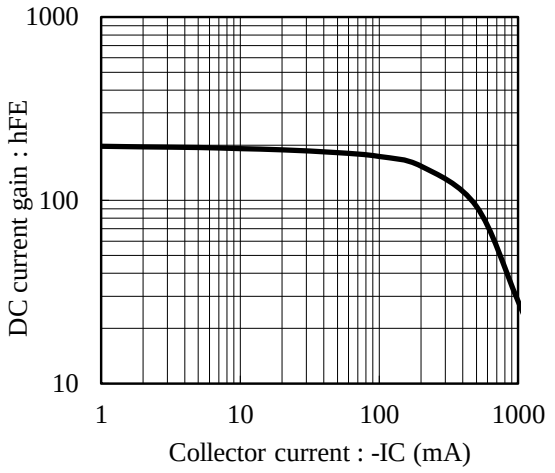

Fig.3 VCE(sat) - IC
at IC/IB= 10, Ta= 25C

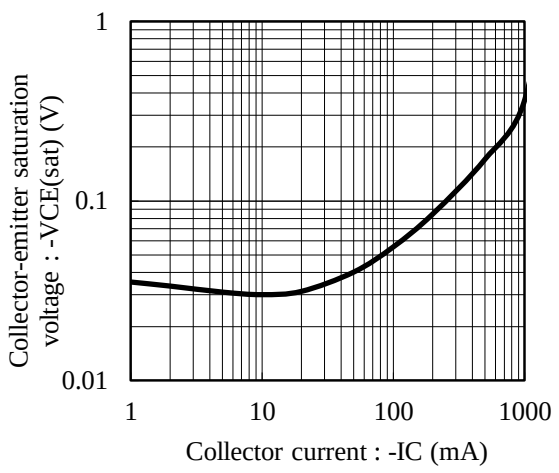

Fig.4 fT - IE
at VCE= -5V, Ta= 25C

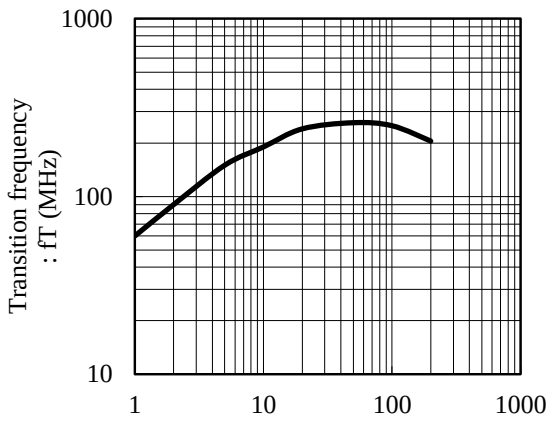

Fig.5 Cob - VCB
at f= 1MHz, Ta= 25C

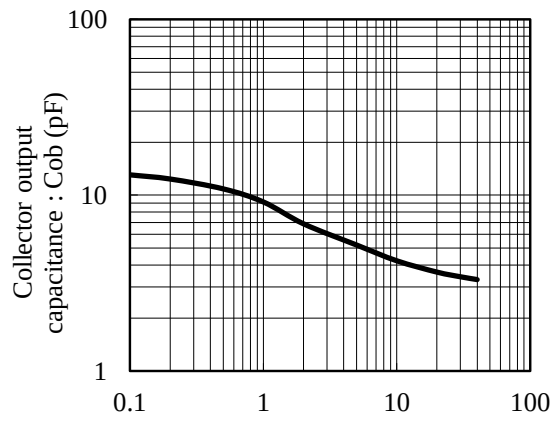

Fig.6 Cib - VEB
at f= 1MHz, Ta= 25C