Silicon PNP transistor epitaxial type
6B016

[Applications]

General purpose amplifier and switching

[Feature]

Correspond to BC807
High collector current
Low collector-emitter saturation voltage VCE(sat)= -0.2V(Typ.) at IC= -500mA, IB= -50mA
Small collector output capacitance Cob= 6pF(Typ.) at VCB= -10V
Complimentary pair with phenitec P/N D5016

[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-50	V
Collector-emitter voltage	VCEO	-45	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	-50	-	-	V	IC= -10uA, IE= 0A
Collector-emitter breakdown voltage	BVCEO	-45	-	-	V	IC= -10mA, IB= 0A
Emitter-base breakdown voltage	BVEBO	-5	-	-	V	IE= -1uA, IC= 0A
Collector cut-off current	ICBO	-	-	-100	nA	VCB= -20V, IE= 0A
Emitter cut-off current	IEBO	-	-	-100	nA	VEB= -5V, IE= 0A
DC current gain 1	hFE 1	100	-	600	-	VCE= -1V, IC= -100mA
DC current gain 2	hFE 2	40	-	-	-	VCE= -1V, IC= -500mA
Collector-emitter saturation voltage	VCE(sat)	-	-	-0.7	V	IC= -500mA, IB= -50mA
Base-emitter on voltage	VBE(on)	-	-	-1.2	V	VCE= -1V, IC= -500mA
Transition frequency	f T	100	-	-	MHz	VCE= -5V, IE= 10mA
Collector output capacitance	Cob	-	6	-	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= -1V, Ta= 25C

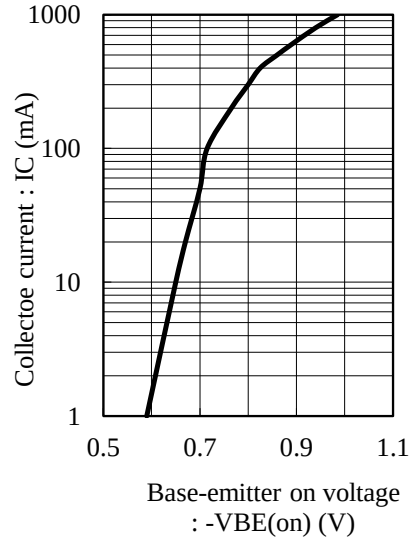

Fig.2 hFE - IC
at VCE= -1V, Ta= 25C

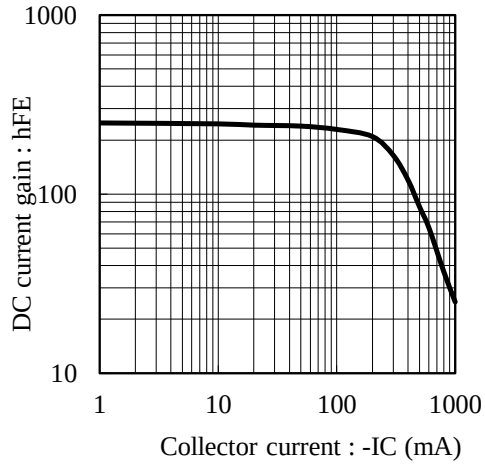

Fig.3 VCE(sat) - IC
at IC/IB= 10, Ta= 25C

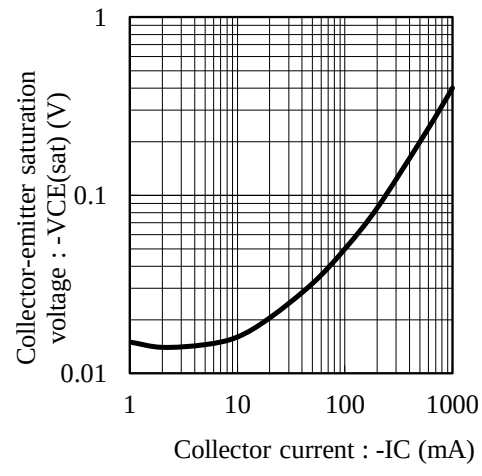

Fig.4 fT - IE
at VCE= -5V, Ta= 25C

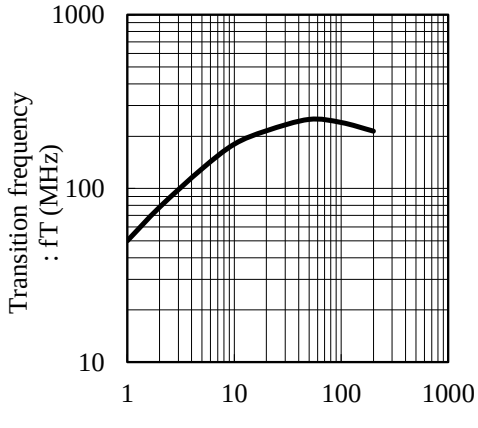

Fig.5 Cob - VCB
at f= 1MHz, Ta= 25C