

Silicon PNP transistor epitaxial type A5887

[Applications]

General purpose amplifier

[Feature]

Suitable for small surface mount package built-in with shrinked die

High collector-emitter breakdown voltage $BV_{CEO} = -50V$

High collector current $I_C = -100mA$

Excellent hFE linearity

[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	-5	V
Collector current	IC	-100	mA
Base current	IB	-30	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	$I_C = -10\mu A, I_E = 0A$
Collector-emitter breakdown voltage	BVCEO	-50	-	-	V	$I_C = -100\mu A, I_B = 0A$
Emitter-base breakdown voltage	BVEBO	-5	-	-	V	$I_E = -10\mu A, I_C = 0A$
Collector cut-off current	ICBO	-	-	-0.1	μA	$V_{CB} = -50V, I_E = 0A$
Emitter cut-off current	IEBO	-	-	-0.1	μA	$V_{EB} = -5V, I_E = 0A$
DC current gain	hFE	120	-	400	-	$V_{CE} = -6V, I_C = -2mA$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-0.18	-0.3	V	$I_C = -100mA, I_B = -10mA$
Transition frequency	fT	80	-	-	MHz	$V_{CE} = -10V, I_E = 1mA$
Collector output capacitance	Cob	-	1.6	-	pF	$V_{CB} = -10V, f = 1MHz, I_E = 0A$

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.

No. A5887-20090617

Fig.1 hFE - IC
at VCE= -6V, Ta= 25C

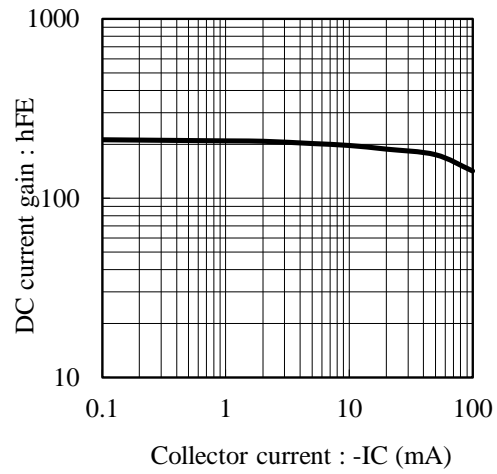


Fig.2 hFE - IC
at VCE= -1V, Ta= 25C

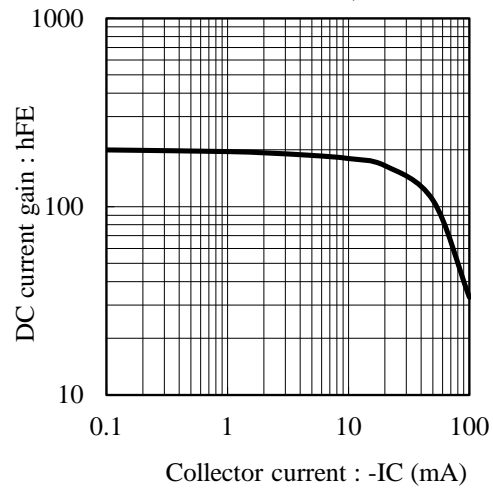


Fig.3 VCE(sat) - IC
at IC/IB= 10, Ta= 25C

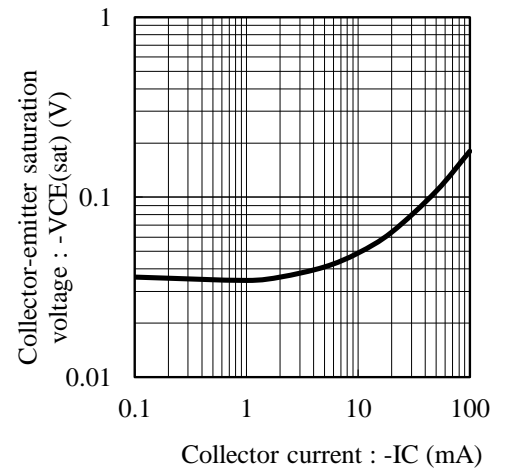


Fig.3 fT - IE
at VCE= -10V, Ta= 25C

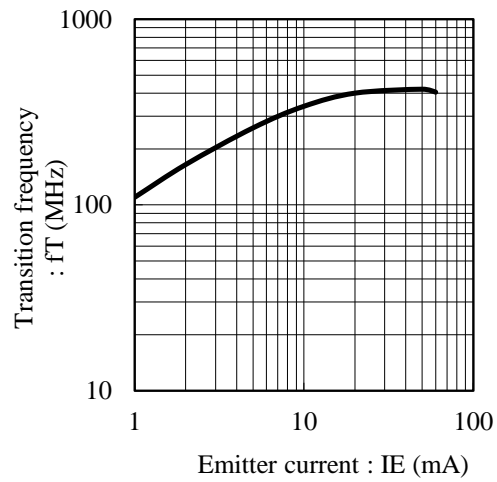


Fig.4 Cob - VCB
at f= 1MHz, Ta= 25C

