

**Silicon PNP transistor epitaxial type
BP922**

[Applications]

General purpose amplifier, switching

[Feature]

Low collector-emitter saturation voltage $V_{CE(sat)} = -1.2V(\text{Max.})$ at $I_C/I_B = -3A/-0.375A$

Low transition frequency $f_T = 3\text{MHz}(\text{Min.})$ at $V_{CE} = -10V, I_E = 0.5A$

[Absolute maximum ratings ($T_a=25C$)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	-100	V
Collector-emitter voltage	VCEO	-100	V
Emitter-base voltage	VEBO	-5	V
Collector current (DC)	IC	-3	A
Collector current (Pulse)	IC	-5	A
Base current (DC)	IB	-1	A
Junction temperature	Tj	150	C
Storage temperature	Tstg	-55 to 150	C

[Electrical characteristics ($T_a=25C$)]

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BVCEO	-100	-	-	V	$I_C = -30\text{mA}$
Collector cut-off current	ICEO	-	-	-1	μA	$V_{CE} = -60\text{V}$
Collector cut-off current	ICES	-	-	-1	μA	$V_{CE} = -100\text{V}$
Emitter cut-off current	IEBO	-	-	-1	μA	$V_{EB} = -5\text{V}$
DC current gain 1	hFE 1	25	-	-	-	$V_{CE} = -4\text{V}, I_C = -1\text{A}$
DC current gain 2	hFE 2	10	-	50	-	$V_{CE} = -4\text{V}, I_C = -3\text{A}$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	-1.2	V	$I_C = -3\text{A}, I_B = -0.375\text{A}$
Base-emitter on voltage	$V_{BE(on)}$	-	-	-1.8	V	$V_{CE} = -4\text{V}, I_C = -3\text{A}$
Transition frequency	fT	3	-	-	MHz	$V_{CE} = -10\text{V}, I_E = 0.5\text{A}$

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 $V_{BE(on)} - I_C$
at $V_{CE} = -4V, T_a = 25C$

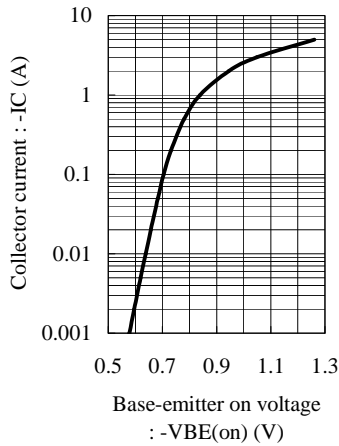


Fig.2 $h_{FE} - I_C$
at $V_{CE} = -4V, T_a = 25C$

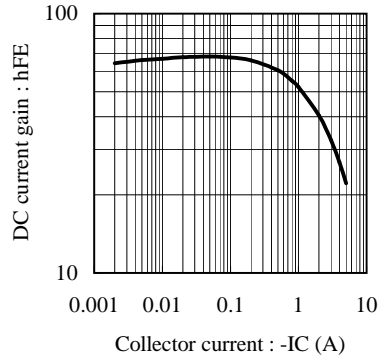


Fig.3 $V_{CE(sat)} - I_C$
at $I_C/I_B = 8, T_a = 25C$

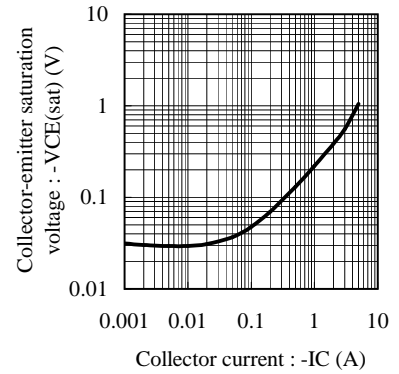


Fig.4 $V_{CE(sat)} - I_C$
at $I_C/I_B = 10, T_a = 25C$

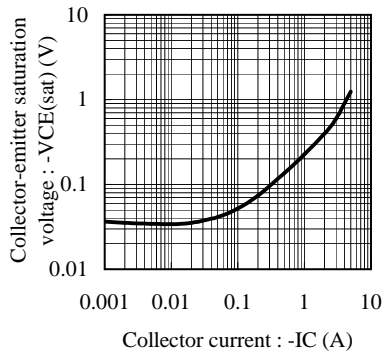


Fig.5 $V_{BE(sat)} - I_C$
at $I_C/I_B = 10, T_a = 25C$

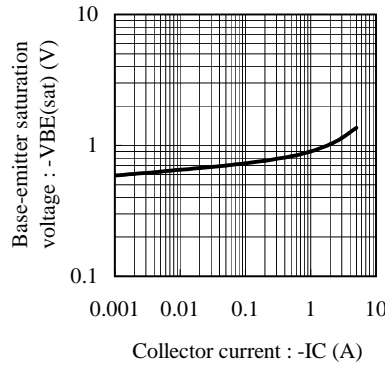


Fig.6 $f_T - I_E$
at $V_{CE} = -10V, T_a = 25C$

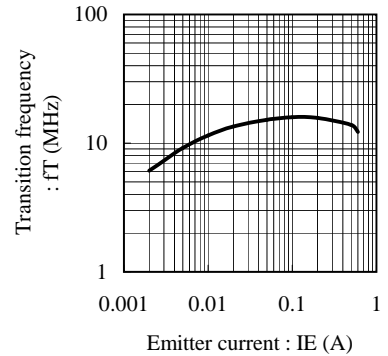


Fig.7 $C_{ob} - V_{CB}$
at $f = 1MHz, T_a = 25C$

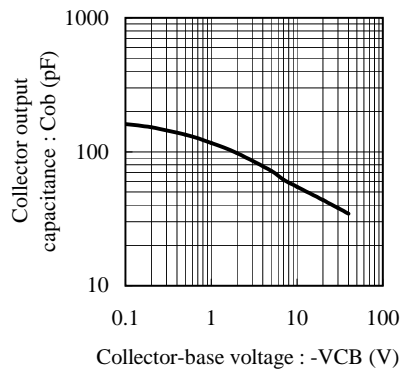


Fig.8 $C_{ib} - V_{EB}$
at $f = 1MHz, T_a = 25C$

