

**Silicon NPN transistor epitaxial type
C5955**

[Applications]

General purpose amplifier

[Feature]

Low saturation voltage $V_{CE(sat)} = 0.5V$ (Max.) at $I_C = 500mA$, $I_B = 50mA$
PNP complementary pair with A5955

[Absolute maximum ratings (Ta=25C)]

Characteristic	Symbol	Maximum ratings	Unit
Collector-base voltage	VCBO	120	V
Collector-emitter voltage	VCEO	100	V
Emitter-base voltage	VEBO	6	V
Collector current	IC	1	A
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	120	-	-	V	$I_C = 100\mu A$
Collector-emitter breakdown voltage	BVCEO	100	-	-	V	$I_C = 10mA$
Emitter-base breakdown voltage	BVEBO	6	-	-	V	$I_E = 100\mu A$
Collector cut-off current	ICBO	-	-	500	nA	$V_{CB} = 120V$
Emitter cut-off current	IEBO	-	-	500	nA	$V_{EB} = 6V$
DC current gain 1	hFE 1	140	220	330	-	$V_{CE} = 2V$, $I_C = 150mA$
DC current gain 2	hFE 2	40	-	-	-	$V_{CE} = 5V$, $I_C = 1A$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	0.5	V	$I_C = 500mA$, $I_B = 50mA$
Base-emitter saturation voltage	$V_{BE(sat)}$	-	-	1.1	V	$I_C = 500mA$, $I_B = 50mA$
Transition frequency	fT	100	-	-	MHz	$V_{CE} = 5V$, $I_E = -50mA$
Collector output capacitance	Cob	-	-	10	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.

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

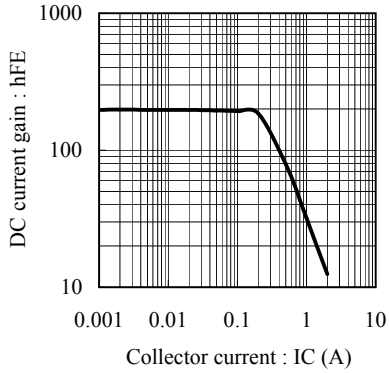


Fig.2 hFE - IC
at VCE= 5V, Ta= 25C

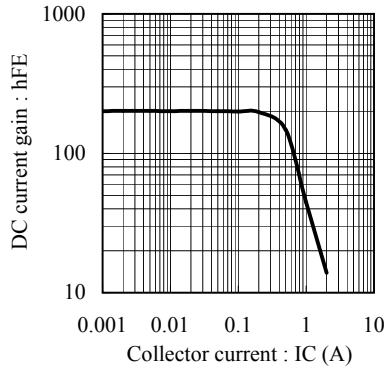


Fig.3 VCE(sat) - IC
at IC/IB= 10, Ta= 25C

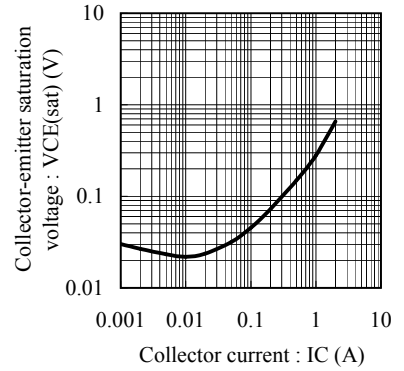


Fig.4 VBE(sat) - IC
at IC/IB= 10, Ta= 25C

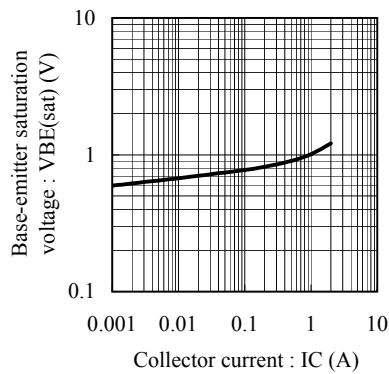


Fig.5 fT - IE
at VCE= 5V, Ta= 25C

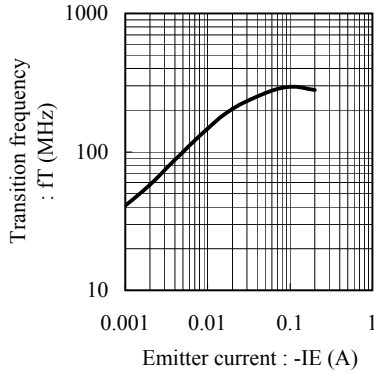


Fig.6 Cob - VCB
at f= 1MHz, Ta= 25C

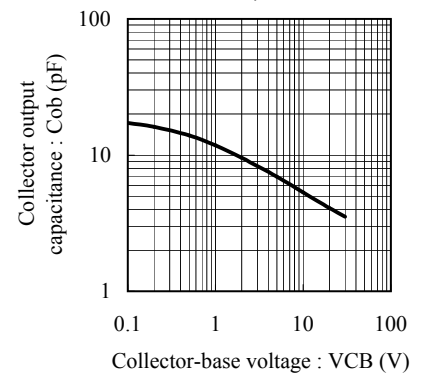


Fig.7 Cib - VEB
at f= 1MHz, Ta= 25C

