

**Silicon PNP transistor epitaxial type  
A5885**

**[ Applications ]**

High side switches  
Compact relay, Motor drivers

**[ Feature ]**

Shrunked die size for small package assembly  
High collector current  $I_C = -650\text{mA}$   
Small saturation voltage at high current  $V_{CE(sat)} = -0.65\text{V}$  at  $I_C = -500\text{mA}$   
Excellent hFE linearity

**[ Absolute maximum ratings (Ta=25C) ]**

Characteristic	Symbol	Maximum ratings	Unit
Collector-Base Voltage	VCBO	-25	V
Collector-Emitter Voltage	VCEO	-20	V
Emitter-Base Voltage	VEBO	-4	V
Peak Collector Current	ICM	-1000	mA
Collector Current	IC	-650	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	-25	-	-	V	$I_C = -10\mu\text{A}$ , $I_E = 0\text{A}$
Collector-Emitter Breakdown Voltage	BVCEO	-20	-	-	V	$I_C = -100\mu\text{A}$ , $I_B = 0\text{A}$
Emitter-Base Breakdown Voltage	BVEBO	-4	-	-	V	$I_E = -10\mu\text{A}$ , $I_C = 0\text{A}$
Collector Cut-off Current	ICBO	-	-	-1	$\mu\text{A}$	$V_{CB} = -25\text{V}$ , $I_E = 0\text{A}$
Emitter Cut-off Current	IEBO	-	-	-1	$\mu\text{A}$	$V_{EB} = -2\text{V}$ , $I_E = 0\text{A}$
DC Current Gain	hFE	150	-	800	-	$V_{CE} = -4\text{V}$ , $I_C = -100\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-0.35	-0.65	V	$I_C = -500\text{mA}$ , $I_B = -25\text{mA}$
Transition Frequency	fT	-	180	-	MHz	$V_{CE} = -6\text{V}$ , $I_E = 10\text{mA}$

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= -4V, Ta= 25C

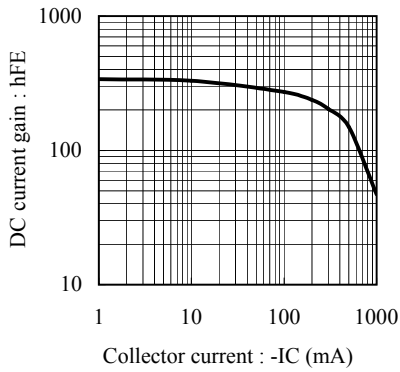


Fig.2 VCE(sat) - IC  
at IC/IB= 20, Ta= 25C

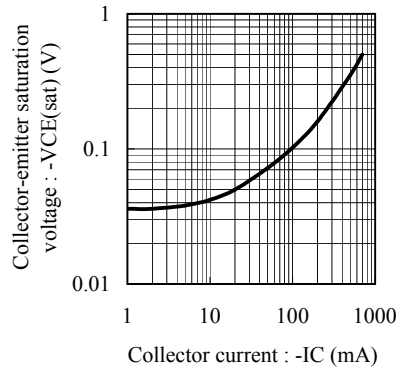


Fig.3 fT - IE  
at VCE= -6V, Ta= 25C

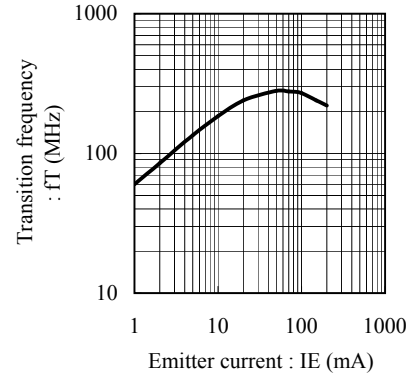


Fig.4 Cob - VCB  
at f= 1MHz, Ta= 25C

