2SB1197 TRANSISTOR (PNP)

FEATURES

- Low $V_{CE(sat)}$.$V_{CE(sat)}$<-0.5V(I_C / I_B = -0.5A /-50mA)
- I_C =-0.8A.
- Complements the 2SD1781.

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector- Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-32	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.8	A
P_C	Collector Power Dissipation	200	mW
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

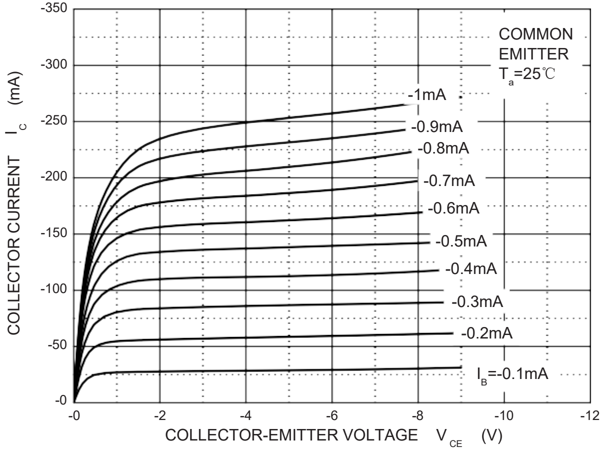
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C =-50μA, I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = -1mA, I_B=0	-32			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -50μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-20V,I_E=0			-0.5	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -4V,I_C=0			-0.5	μA
DC current gain	h_{FE}	V_{CE}=-3V,I_C= -100mA	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500 mA, I_B= -50mA			-0.5	V
Transition frequency	f_T	V_{CE}=-5V, I_C= -50mA, f=100MHz	50	200		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz		12	30	pF

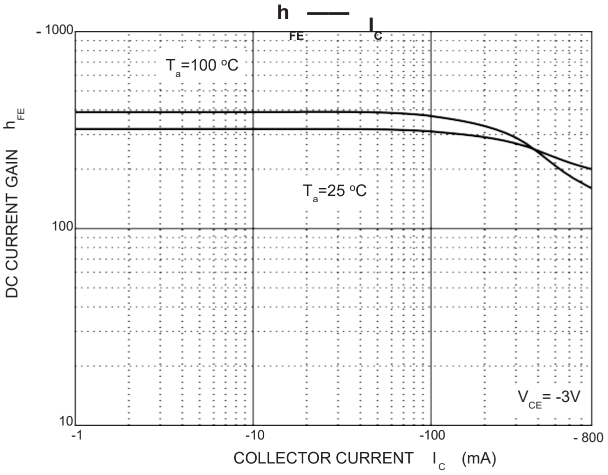
CLASSIFICATION OF h_{FE}

Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	AHP	AHQ	AHR

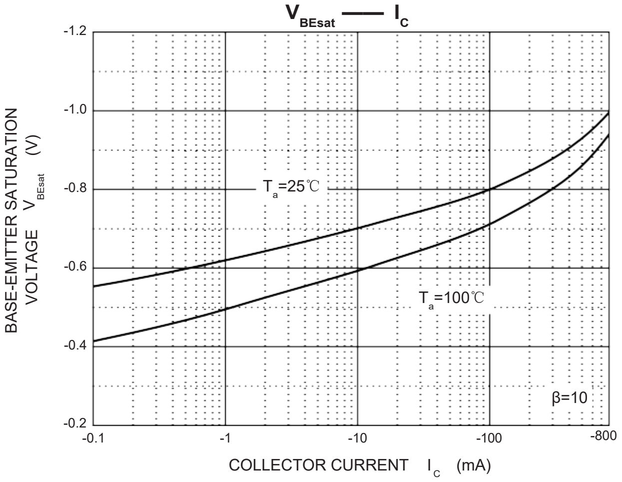
Static Characteristic



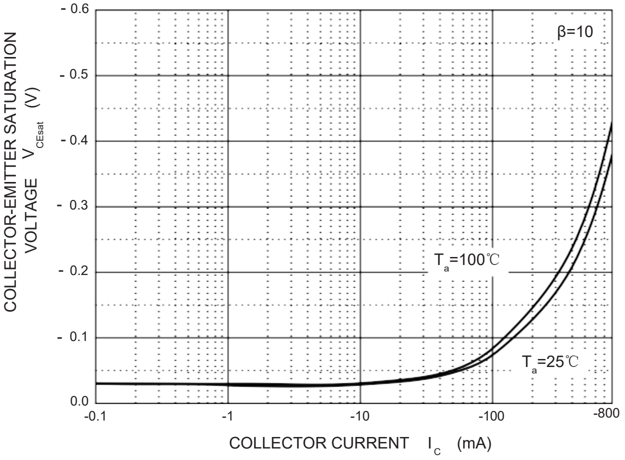
h_{FE} —— I_C



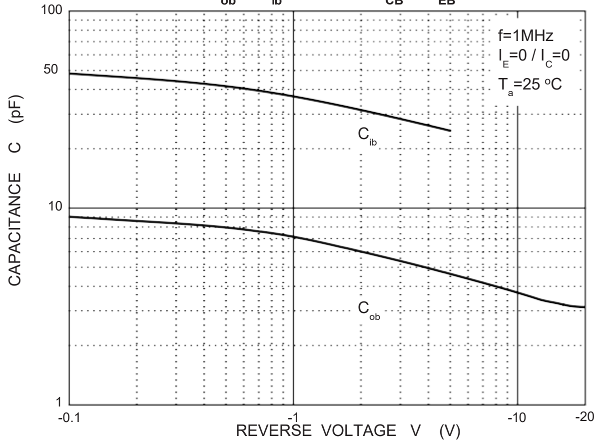
V_{BEsat} —— I_C



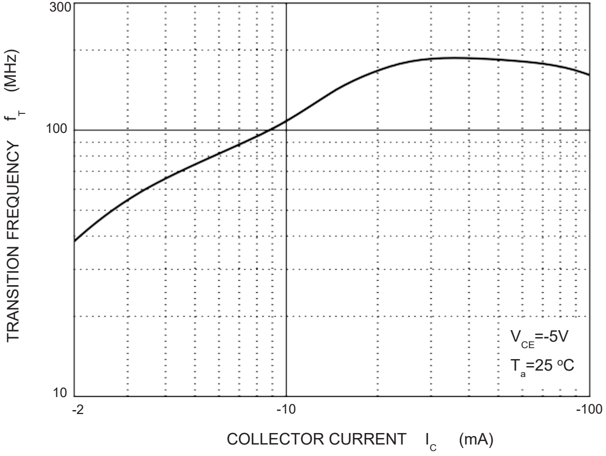
V_{CEsat} —— I_C



C_{ob} / C_{ib} —— V_{CB} / V_{EB}



f_T —— I_C



P_c —— T_a