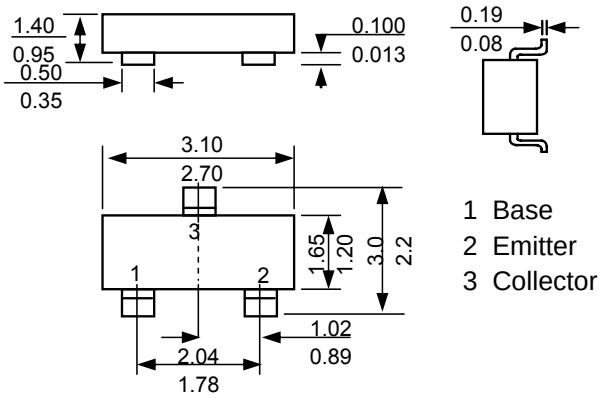
PNP Transistors

SS8550

FEATURES

- High Collector Current
- Complementary to SS8050

SOT-23



Dimensions in millimeters

MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector–Base Voltage	V_{CBO}	-40	V
Collector–Emitter Voltage	V_{CEO}	-25	V
Emitter–Base Voltage	V_{EBO}	-5	V
Collector Current — Continuous	I_C	-1.5	A
Collector Dissipation	P_C	200	mW
Thermal Resistance From Junction To Ambient	R_{thJA}	625	℃/W
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~+150	℃

CLASSIFICATION OF $h_{FE(1)}$

RANK	L	H	J
RANGE	120-200	200-350	300-400
MARKING	Y2		

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C =-100uA, I_E = 0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C =-0.1 mA, I_B = 0	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E =-100uA, I_C = 0	-5			V
Collector cut-off current	I_{CBO}	V_{CB} =-40V, I_E = 0			-0.1	uA
Collector cut-off current	I_{CEO}	V_{CE} =-20V, I_B =0			-0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB} =-5V, I_C = 0			-0.1	uA
DC current gain	h_{FE1}	V_{CE} =-1V, I_C =-100mA	120		400	
	h_{FE2}	V_{CE} =-1V, I_C =-800mA	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C =-800mA, I_B =-80mA			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C =-800mA, I_B =-80mA			-1.2	V
Base-emitter voltage	V_{BE}	V_{BE} =-1V, I_C =-10mA			-1	V
Transition frequency	f_T	V_{CE}=-10V,I_C=-50mA, f=30MHz	100			MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0, f=1MHz			20	

RATING AND CHARACTERISTIC CURVES (SS8550)

Fig.1 I_C —— V_{CE}

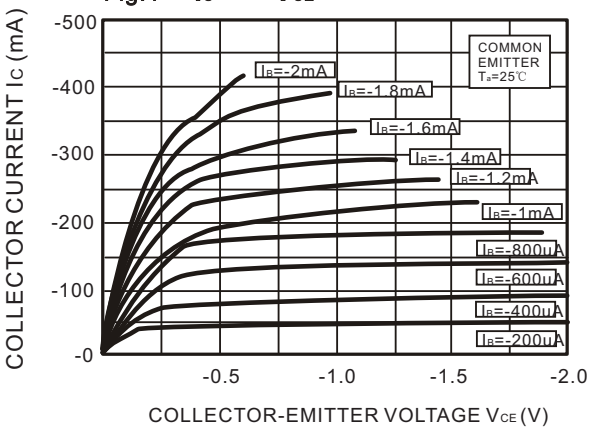


Fig.2 P_C —— T_a

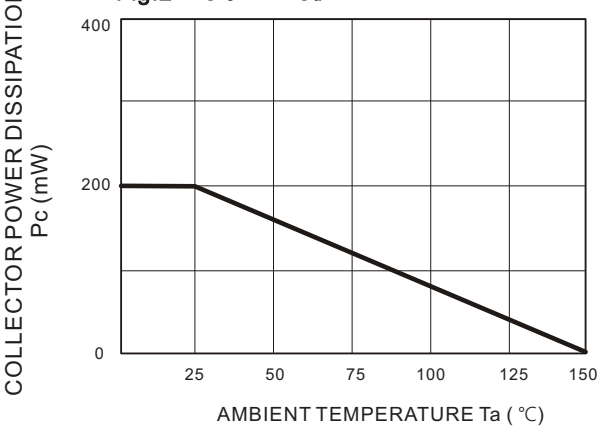


Fig.3 C_{ob} / C_{ib} —— V_{CB} / V_{EB}

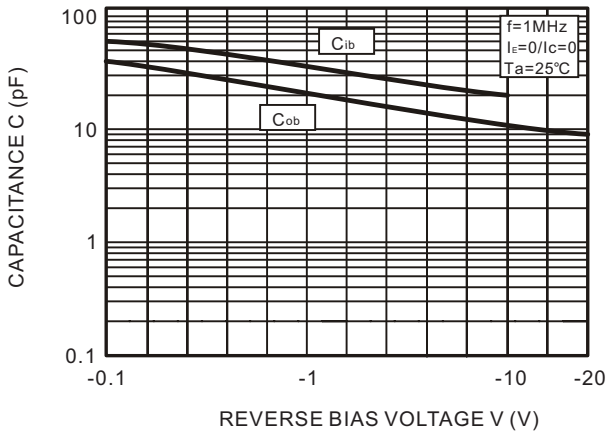


Fig.4 V_{CEsat} —— Ic

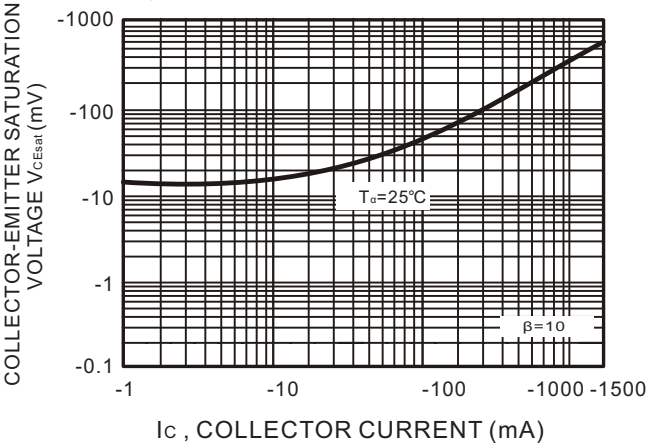


Fig.5 h_{FE}--Ic

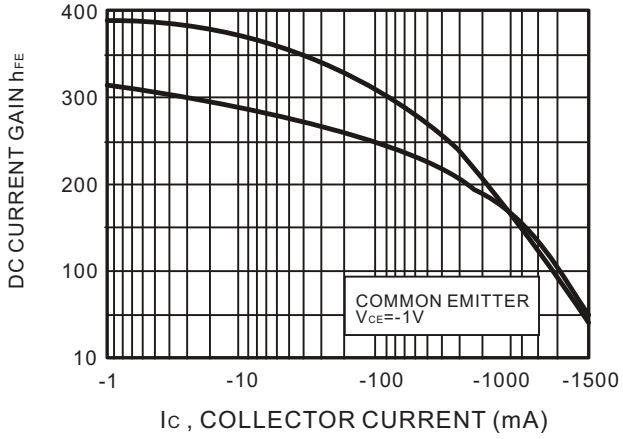


Fig.6 V_{BEsat} —— Ic

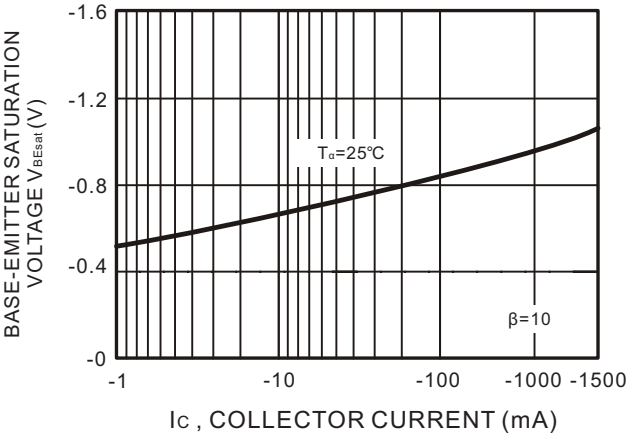


Fig.7 Ic —— V_{BE}

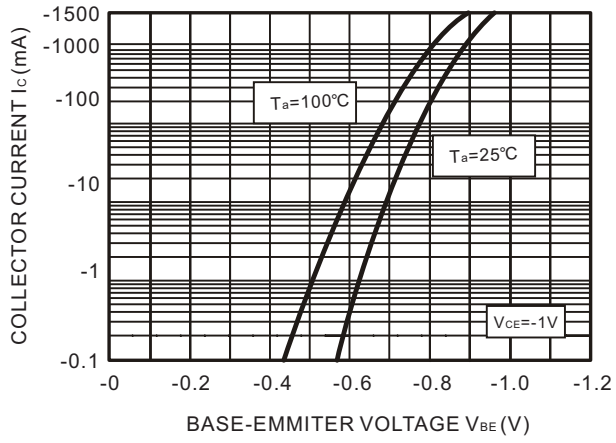
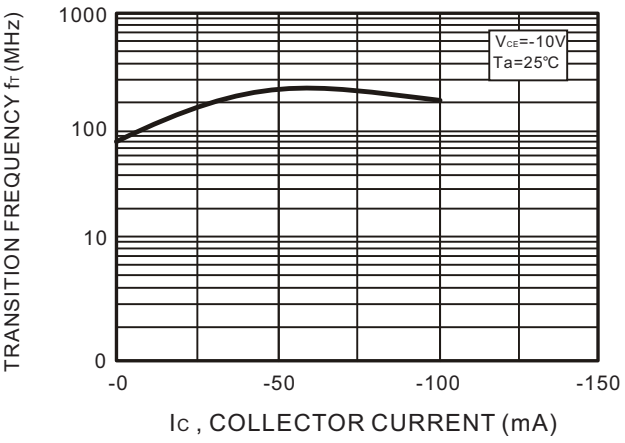



Fig.8 f_T —— Ic