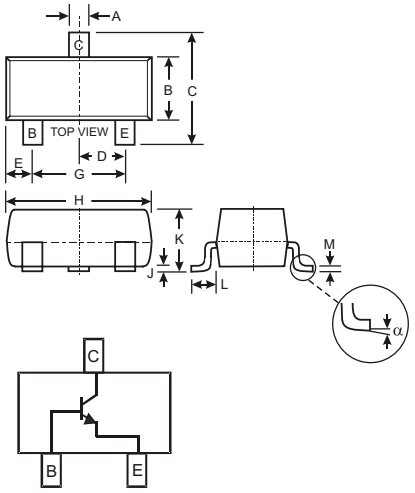
Silicon Epitaxial Planar Transistor **SS8550**

FEATURES

- Collector Current.(I_C= 1.5A)
- Complementary To SS8550.
- Collector Dissipation: P_C=0.3W (T_C=25°C)

APPLICATIONS

- High Collector Current.



SOT-23		
Dim	**Min**	**Max**
A	0.37	0.51
B	1.20	1.40
C	2.30	2.50
D	0.89	1.03
E	0.45	0.60
G	1.78	2.05
H	2.80	3.00
J	0.013	0.10
K	0.903	1.10
L	0.45	0.61
M	0.085	0.180
α	0°	8°
All Dimensions in mm		

ORDERING INFORMATION

Type No.	Marking	Package Code
SS8550	Y2	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1.5	A
P_C	Collector Dissipation	0.3	W
$T_{j,}T_{stg}$	Junction and Storage Temperature	-55~150	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Test conditions**	**MIN**	**TYP**	**MAX**	**UNIT**
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-0.1mA,I_B=0	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-40V,I_E=0			-0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=-20V,I_B=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-1V,I_C=-100mA	120		400	
		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
Transition frequency	f_T	V_{CE}=-10V, I_C= -50mA f=30MHz	100			MHz
Output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz			20	pF
Base-emitter voltage	V_{BEF}	I_E=-1.5A			-1.6	V

CLASSIFICATION OF $h_{FE(1)}$

Rank	L	H	J
Range	120-200	200-350	300-400

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

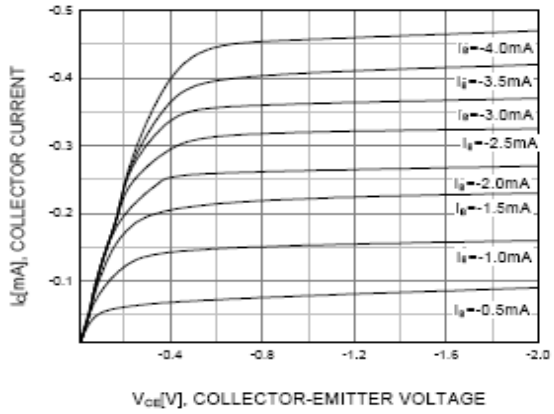


Figure 1. Static Characteristic

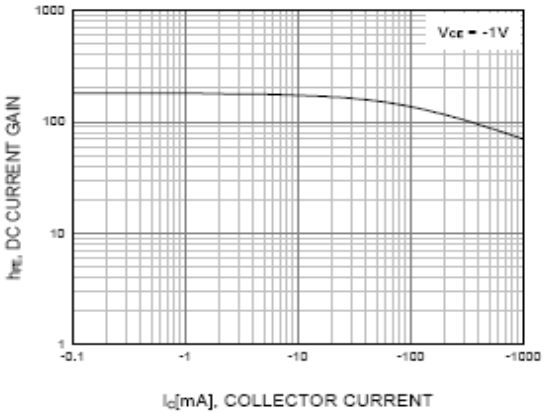


Figure 2. DC current Gain

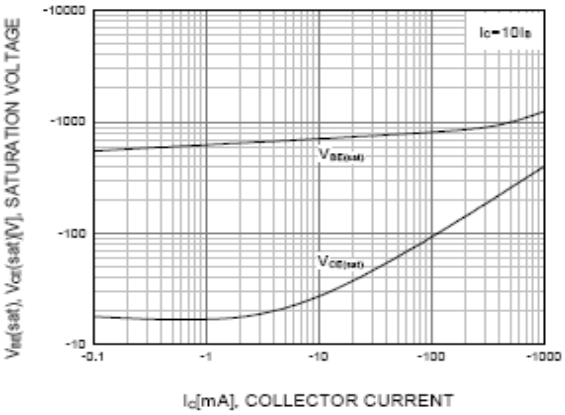


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

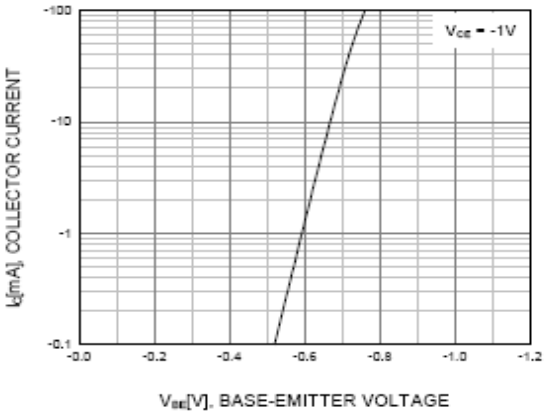


Figure 4. Base-Emitter On Voltage

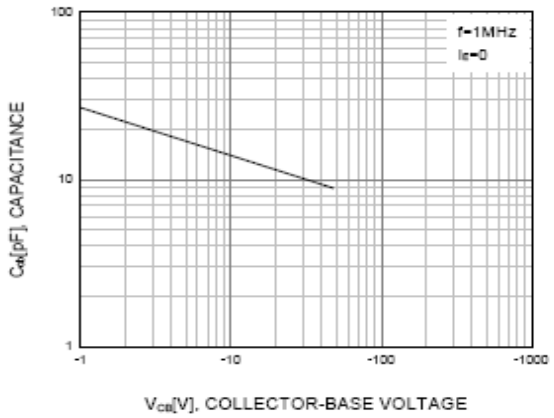


Figure 5. Collector Output Capacitance

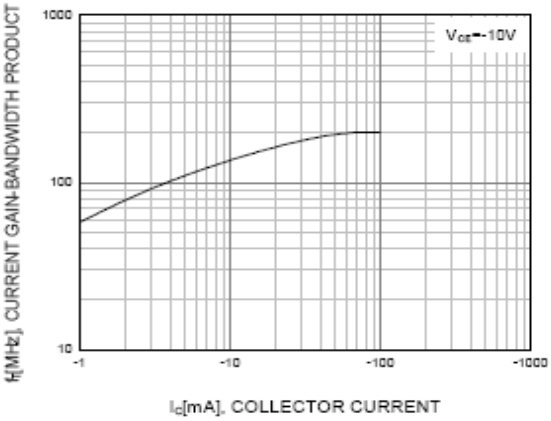


Figure 6. Current Gain Bandwidth Product