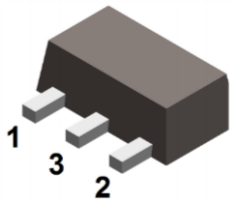
SS8550
Silicon Epitaxial Planar Transistor

FEATURES

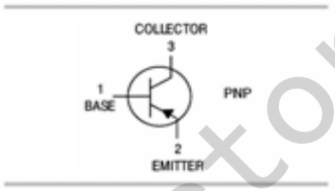
- Collector current (I_C = 1.5A)
- Complementary to SS8050
- Collector dissipation: P_C = 1W (T_C = 25°C)



SOT-89

APPLICATIONS

- High Collector Current.



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	-6	V
I_C	Collector Current -Continuous	-1.5	A
P_C	Collector Dissipation	0.5	W
T_J, T_{STG}	Junction and Storage Temperature	-55 to +150	℃

CLASSIFICATION OF $h_{FE(1)}$

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

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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=-2mA,I_B=0	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-35V,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}=-6V,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	80		
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-800mA, I_B= -80mA		-0.28	-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-800mA, I_B= -80mA		-0.98	-1.2	V
Base-emitter voltage	V_{BE}	V_{CE}=-1V I_C=-10mA		-0.66	-1.0	V
Transition frequency	f_T	V_{CE}=-10V, I_C= -50mA	100	200		MHz
Output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz		15		pF

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TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

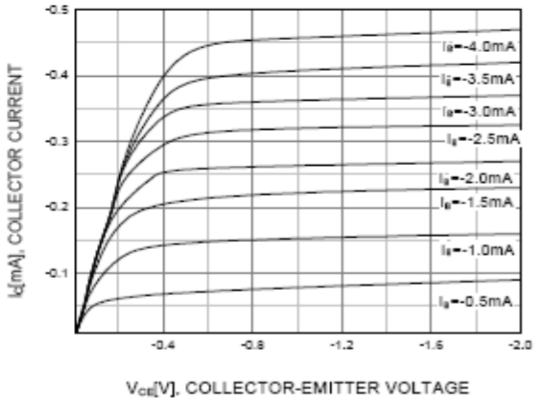


Figure 1. Static Characteristic

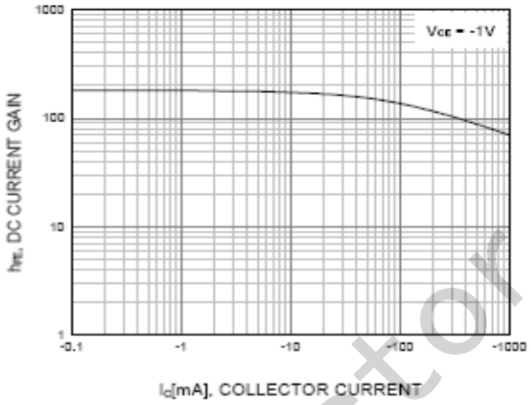


Figure 2. DC current Gain

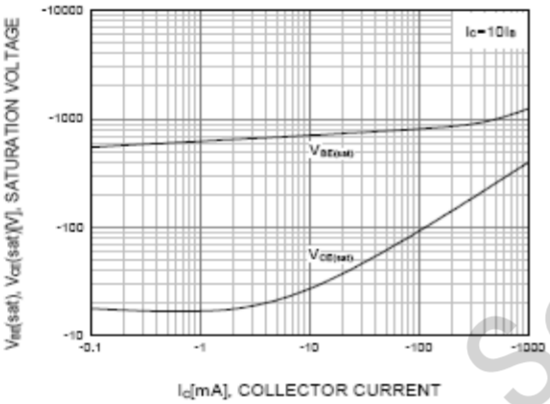


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

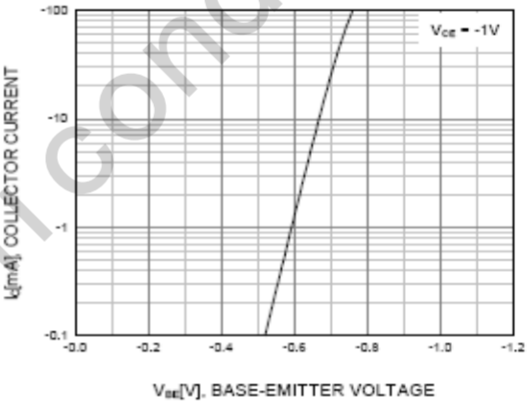


Figure 4. Base-Emitter On Voltage

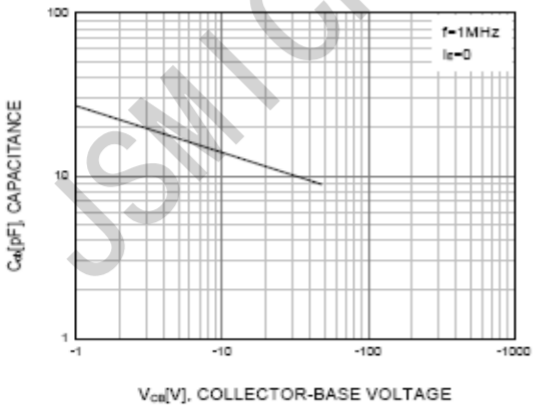


Figure 5. Collector Output Capacitance

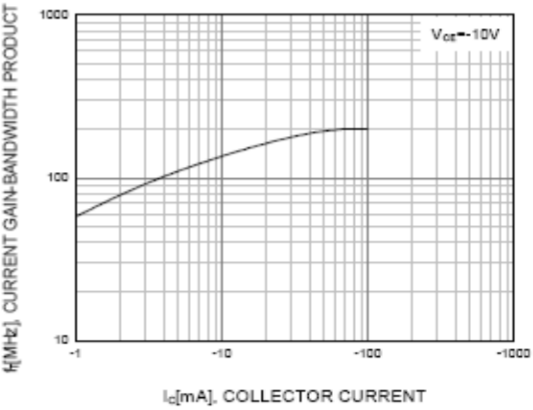
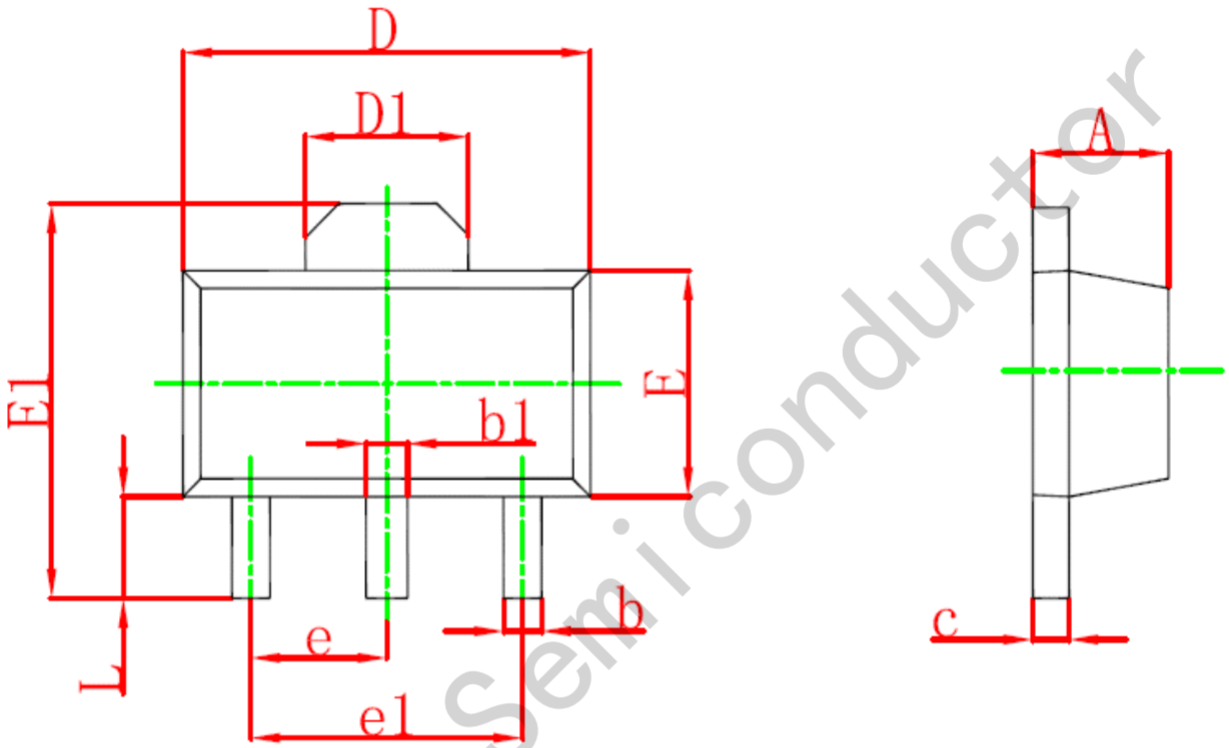


Figure 6. Current Gain Bandwidth Product

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Package Information

SOT-89



Symbol	Dimensions in Millimeters(mm)		Dimensions in Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF		0.061 REF	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP		0.060 TYP	
e1	3.000 TYP		0.118 TYP	
L	0.900	1.200	0.035	0.047

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