S8550

SILICON EPITAXIAL PLANAR TRANSISTOR

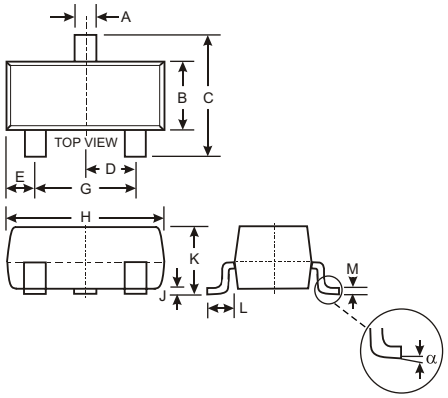
Features

- High Collector Current.(I_C= -500mA)
- Complementary To S8050.
- Excellent H_{FE} Linearity.

Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams
- Approx. Weight: 0.008 grams

RoHS COMPLIANT



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		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

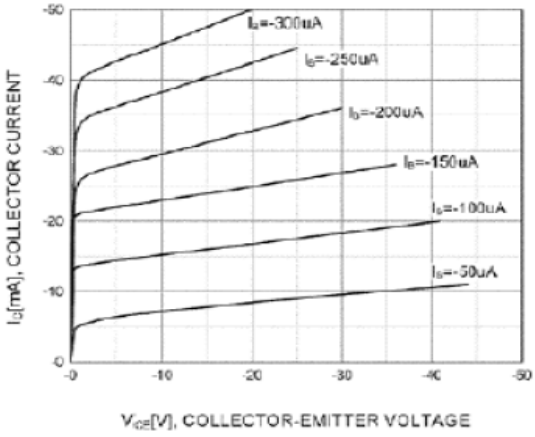
Parameter	Symbol	Value	Units
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-500	mA
Collector Dissipation	P_C	300	mW
Junction and Storage Temperature	T_j,T_{stg}	-55~150	℃

Electrical Characteristics T_A = 25°C unless otherwise specified

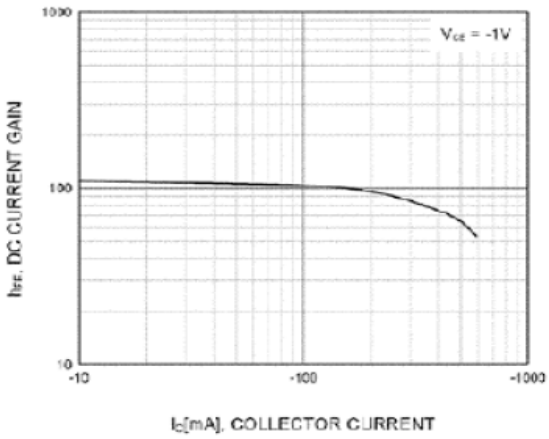
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-5		V
Collector cut-off current	I_{CBO}	V_{CB}=-40V,I_E=0		-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}=-3V,I_C=0		-0.1	μA
DC current gain	h_{FE}	V_{CE}=-1V,I_C=-50mA	120	350	
		V_{CE}=-1V,I_C=-500mA	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500 mA, I_B= -50mA		-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-500 mA, I_B= -50mA		-1.2	V
Transition frequency	f_T	V_{CE}=-6V, I_C= -20mA f=30MHz	150		MHz

Rank	L	H
Range	120-200	200-350

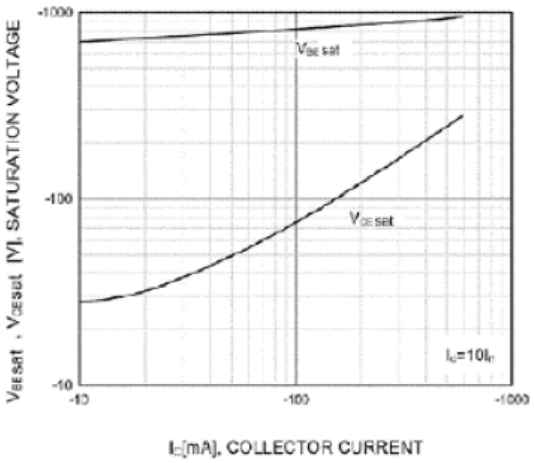
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified



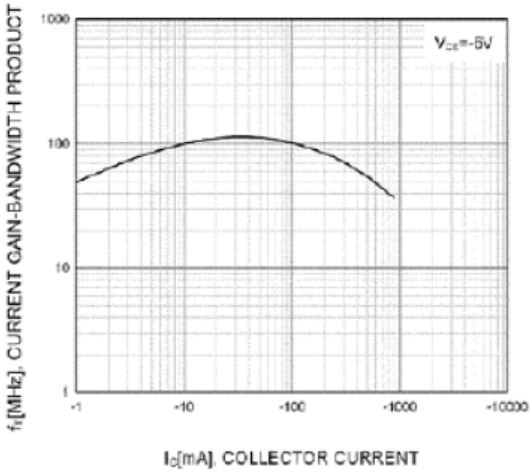
Static Characteristic



DC current Gain



Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



Current Gain Bandwidth Product