## **BL** Galaxy Electrical

### Silicon Epitaxial Planar Transistor

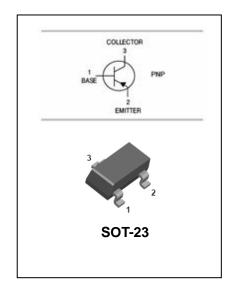
**SS8550** 

#### **FEATURES**

- Collector Current.(I<sub>C</sub>= 1.5A)
- Lead-free
- Complementary To SS8550.
- Collector Dissipation: P<sub>C</sub>=0.3W (T<sub>C</sub>=25°C)

#### **APPLICATIONS**

High Collector Current.



#### ORDERING INFORMATION

Type No.	Marking	Package Code
SS8550	Y2	SOT-23

#### MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	-40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-25	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-1.5	Α
P <sub>C</sub>	Collector Dissipation	0.3	W
$T_{j},T_{stg}$	Junction and Storage Temperature	-55~150	$\mathbb{C}$

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Rev.A



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### ELECTRICAL CHARACTERISTICS @ Ta=25 $^{\circ}$ C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-100μA,I <sub>E</sub> =0	-40			٧
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-0.1mA,I <sub>B</sub> =0	-25			٧
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-100μΑ,I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-40V,I <sub>E</sub> =0			-0.1	μA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> =-20V,I <sub>B</sub> =0			-0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V,I <sub>C</sub> =0			-0.1	μA
DC ourrent gain		V <sub>CE</sub> =-1V,I <sub>C</sub> =-100mA	120		400	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =-1V,I <sub>C</sub> =-800mA	40			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-800mA, I <sub>B</sub> = -80mA			-0.5	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-800mA, I <sub>B</sub> = -80mA			-1.2	V
Transition frequency	f⊤	V <sub>CE</sub> =-10V, I <sub>C</sub> = -50mA f=30MHz	100			MHz
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-10V,I <sub>E</sub> =0,f=1MHz			20	pF
Base-emitter voltage	V <sub>BEF</sub>	I <sub>E</sub> =-1.5A			-1.6	V

## CLASSIFICATION OF $h_{FE(1)}$

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

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### TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

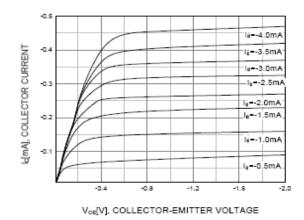


Figure 1. Static Characteristic

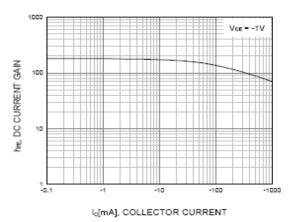


Figure 2. DC current Gain

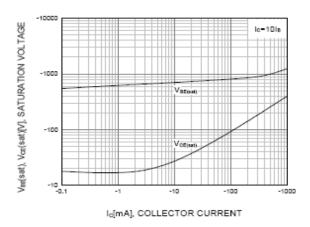


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

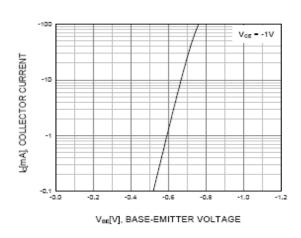


Figure 4. Base-Emitter On Voltage

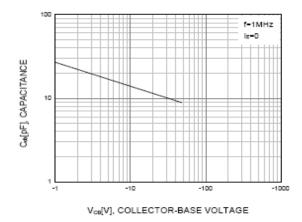


Figure 5. Collector Output Capacitance

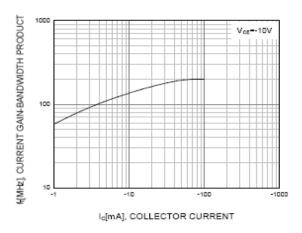


Figure 6. Current Gain Bandwidth Product

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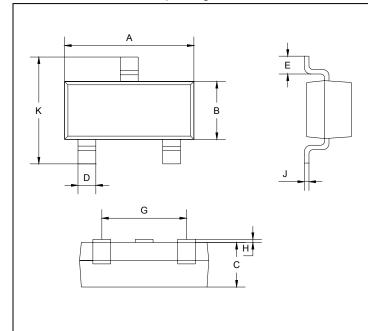
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**SS8550** 

#### PACKAGE OUTLINE

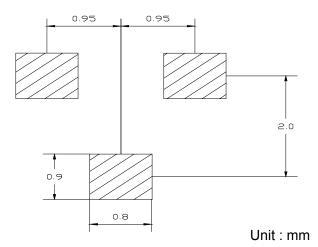
Plastic surface mounted package





SOT-23			
Dim	Min Max		
Α	2.85	2.95	
В	1.25	1.35	
С	1.0Typical		
D	0.37	0.43	
E	0.35	0.48	
G	1.85	1.95	
Н	0.02	0.1	
J	0.1Typical		
K	2.35	2.45	
All Dimensions in mm			

#### **SOLDERING FOOTPRINT**



#### **PACKAGE INFORMATION**

Device	Package	Shipping
SS8550	SOT-23	3000/Tape&Reel