

## Silicon Epitaxial Planar Transistor

## SS8550

### FEATURES

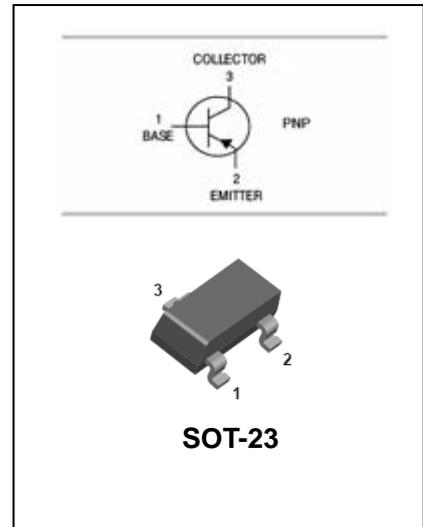
- Collector Current: ( $I_C = 1.5A$ )
- Complementary To SS8050.
- Collector Dissipation:  $P_C = 0.3W$  ( $T_C = 25^\circ C$ )



Lead-free

### APPLICATIONS

- High Collector Current.



### ORDERING INFORMATION

Type No.	Marking	Package Code
SS8550	Y2	SOT-23

### MAXIMUM RATING @ $T_a = 25^\circ C$ 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	0.3	W
$T_j, T_{stg}$	Junction and Storage Temperature	-55 to +150	$^\circ C$

Silicon Epitaxial Planar Transistor

**SS8550**

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-2mA, I_B=0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-6			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-35V, I_E=0$			-0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE}=-20V, I_B=0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-6V, I_C=0$			-0.1	$\mu A$
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	$f_T$	$V_{CE}=-10V, I_C=-50mA$ $f=30MHz$	100	200		MHz
Output capacitance	$C_{ob}$	$V_{CB}=-10V, I_E=0, f=1MHz$		15		pF

CLASSIFICATION OF  $h_{FE(1)}$

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

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TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

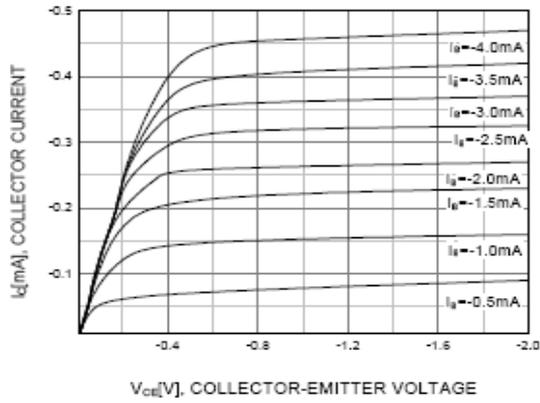


Figure 1. Static Characteristic

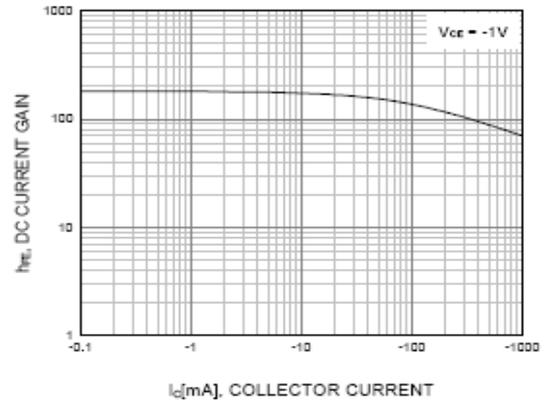


Figure 2. DC current Gain

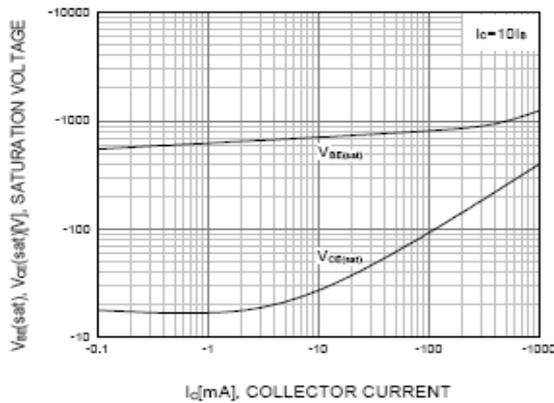


Figure 3. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

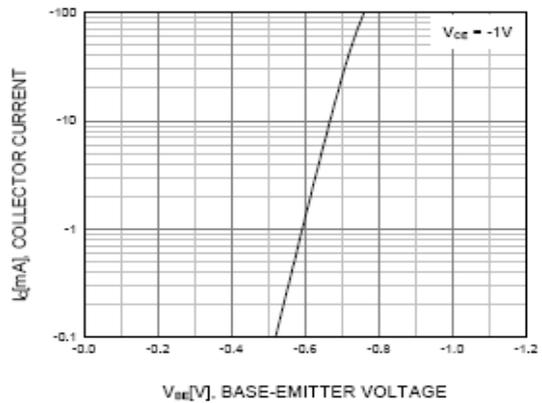


Figure 4. Base-Emitter On Voltage

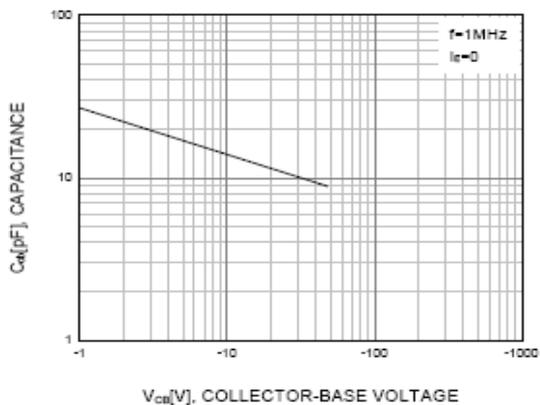


Figure 5. Collector Output Capacitance

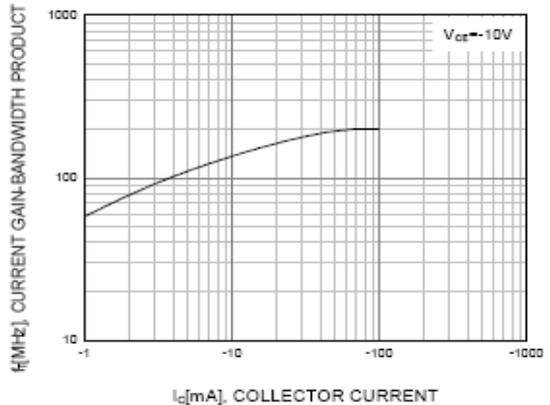


Figure 6. Current Gain Bandwidth Product

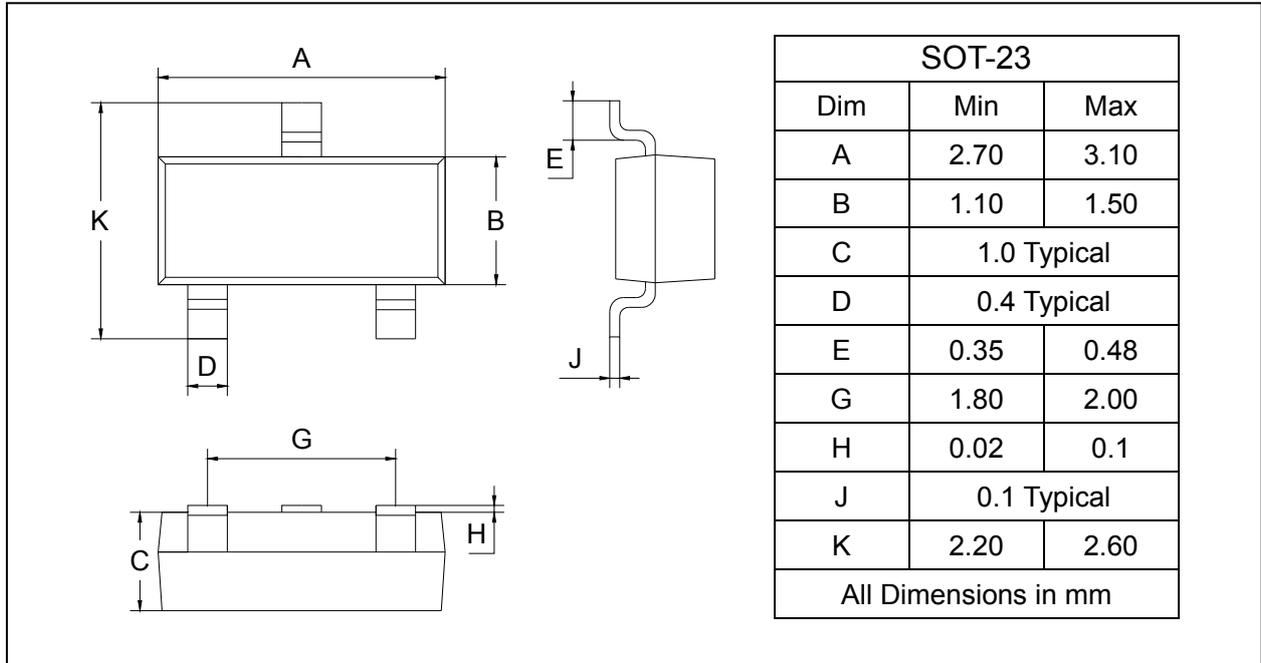
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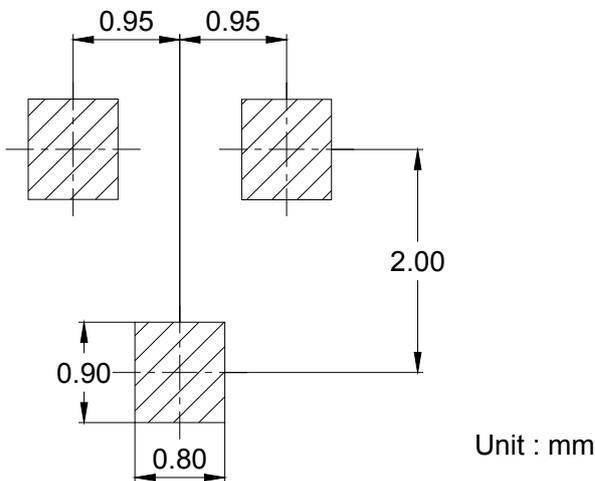
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

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