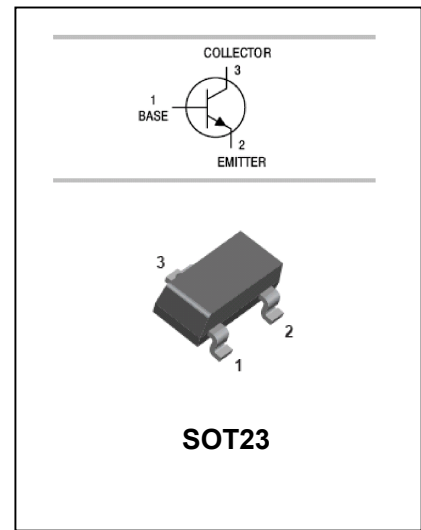


Silicon Epitaxial Planar Transistor

FEATURES

- Collector Current.($I_C = 1.5A$)
- Complementary To SS8050X.
- Collector dissipation: $P_C = 300mW$ ($T_C = 25^\circ C$)



APPLICATIONS

- High Collector Current.

ORDERING INFORMATION

Type No.	Marking	Package Code
SS8050X	Y1	SOT23

MAXIMUM RATING @ $T_a = 25^\circ C$ unless otherwise specified

Symbol	Parameter	Ratings	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	300	mW
T_J, T_{stg}	Junction and Storage Temperature	-55 to +150	$^\circ C$

Silicon Epitaxial Planar Transistor

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	$V_{(BR)CEO}$	$I_C=100\mu A, I_B=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	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

CLASSIFICATION OF $h_{FE(1)}$

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

Silicon Epitaxial Planar Transistor

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

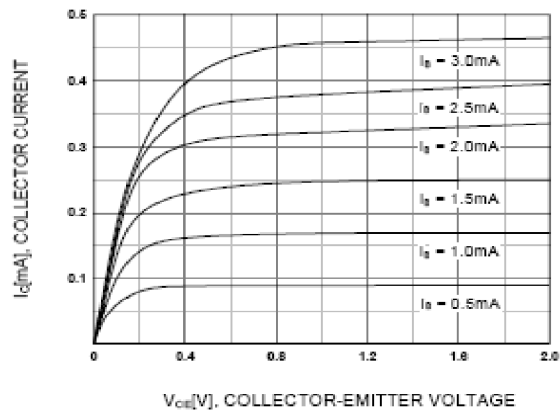


Figure 1. Static Characteristic

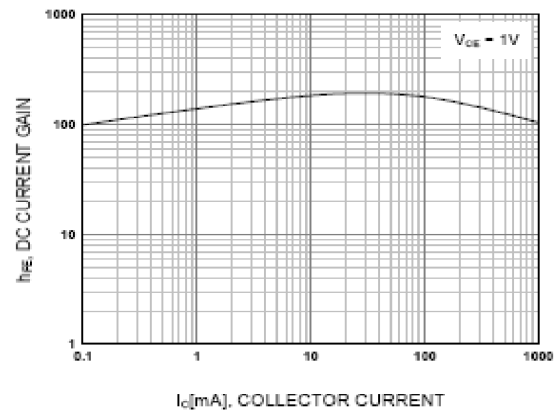


Figure 2. DC current Gain

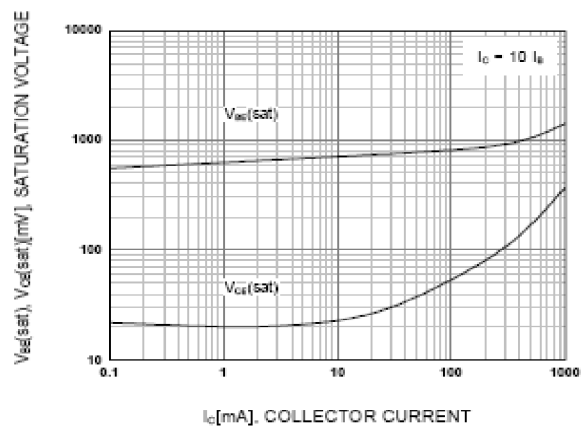


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

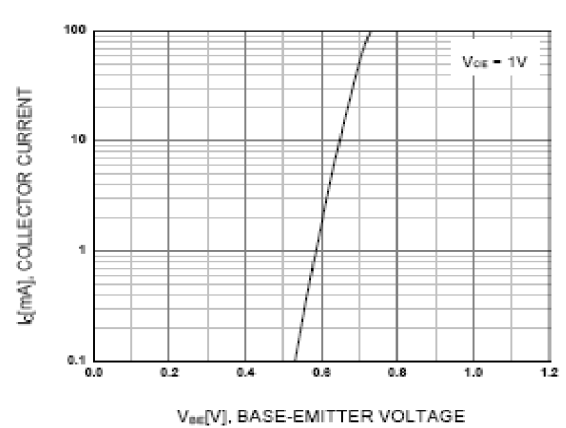


Figure 4. Base-Emitter On Voltage

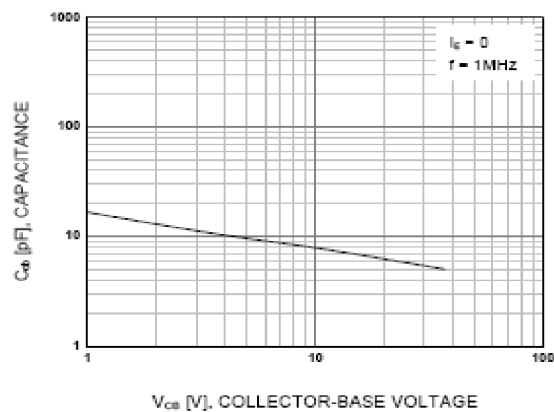


Figure 5. Collector Output Capacitance

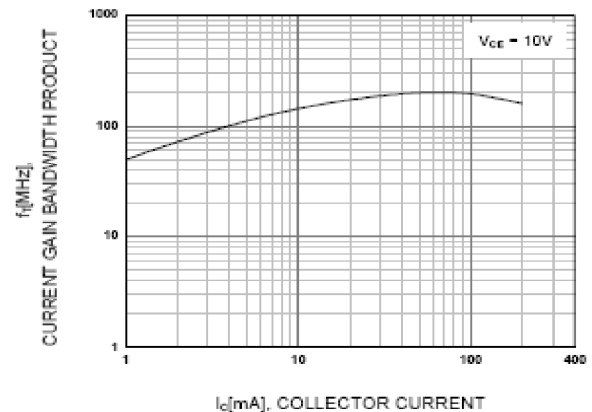


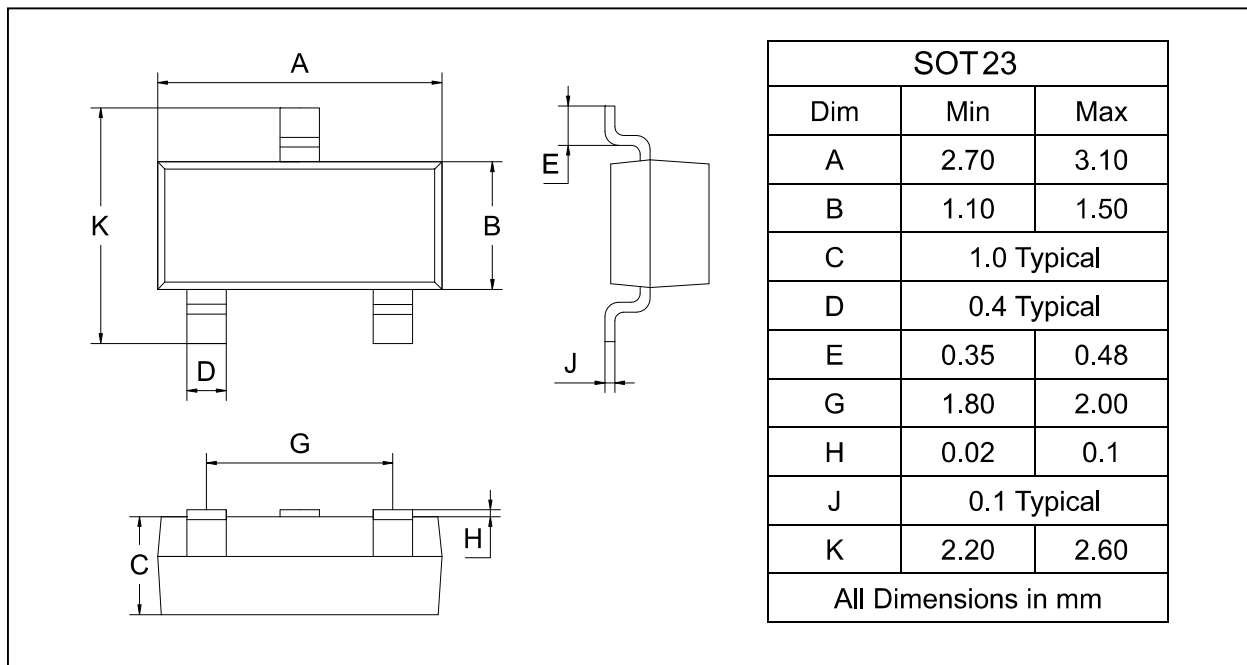
Figure 6. Current Gain Bandwidth Product

Silicon Epitaxial Planar Transistor

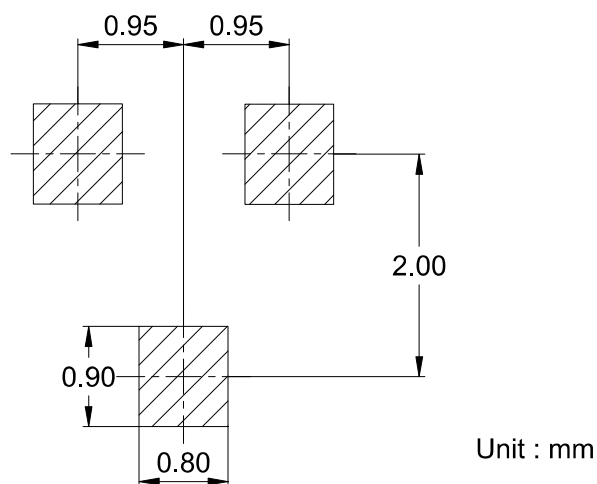
PACKAGE OUTLINE

Plastic surface mounted package

SOT23



SOLDERING FOOTPRINT



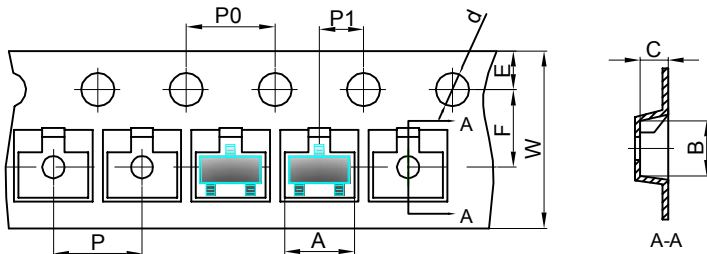
PACKAGE INFORMATION

Device	Package	Shipping
SS8050X	SOT23	3000/Tape&Reel

Silicon Epitaxial Planar Transistor

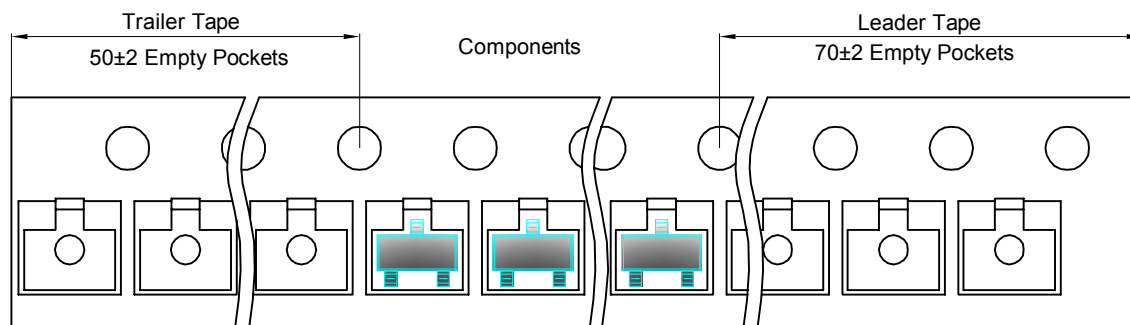
SOT23 Tape and reel

SOT23 Embossed Carrier Tape

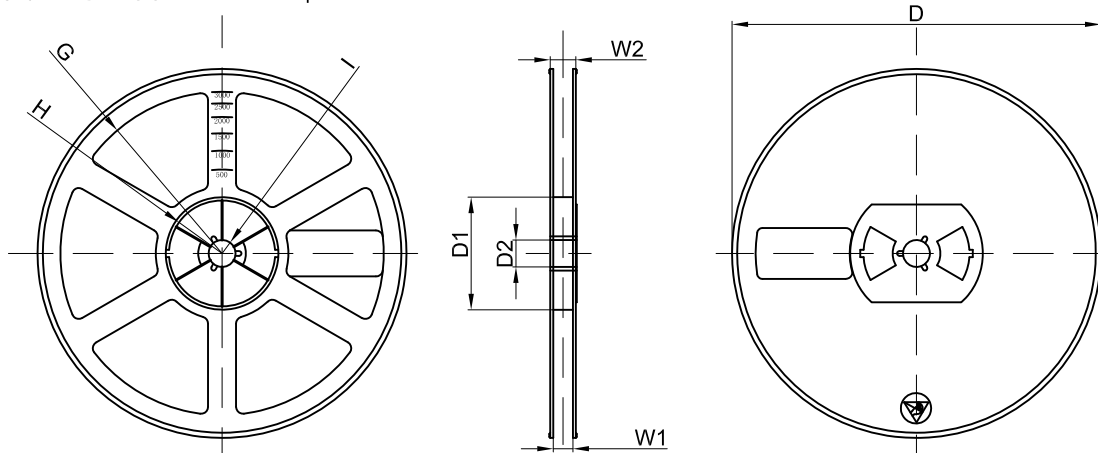


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT23 Tape Leader and Trailer



SOT23 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30