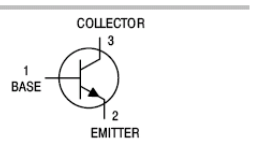
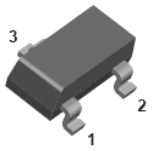
Silicon Epitaxial Planar Transistor **SS8050**

FEATURES

- Collector Current.(I_C= 1.5A)
- Complementary To SS8550.
- Collector dissipation:P_C=300mW(T_C=25℃)

Lead-free





SOT-23

APPLICATIONS

- High Collector Current.

ORDERING INFORMATION

Type No.	Marking	Package Code
SS8050	Y1	SOT-23

MAXIMUM RATING @ Ta=25℃ 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	6	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	℃

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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	110		
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=800 mA, I_B= 80mA		0.28	0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=800 mA, I_B= 80mA		0.98	1.2	V
Base-emitter voltage	V_{BE}	V_{CE}=1V I_C=10mA		0.66	1	V
Output capacitance	C_{ob}	V_{CB}=10V, I_E=0 f=1MHz		9.0		pF
Transition frequency	f_T	V_{CE}=10V, I_C= 50mA f=30MHz	100	190		MHz

CLASSIFICATION OF $h_{FE(1)}$

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

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TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

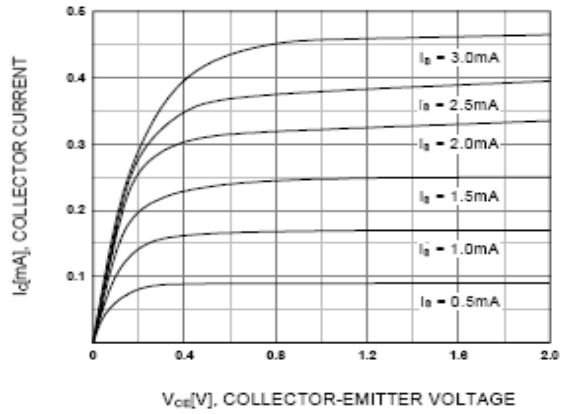

Figure 1. Static Characteristic

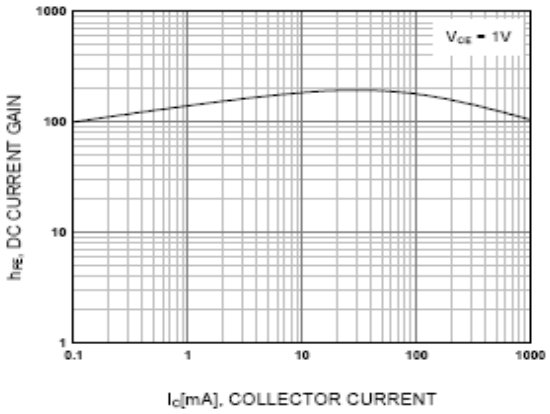

Figure 2. DC current Gain

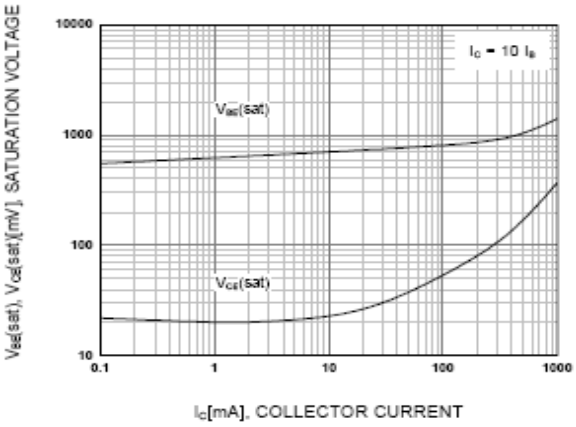

Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

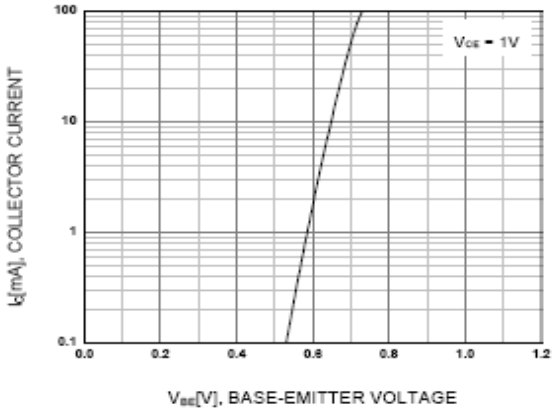

Figure 4. Base-Emitter On Voltage

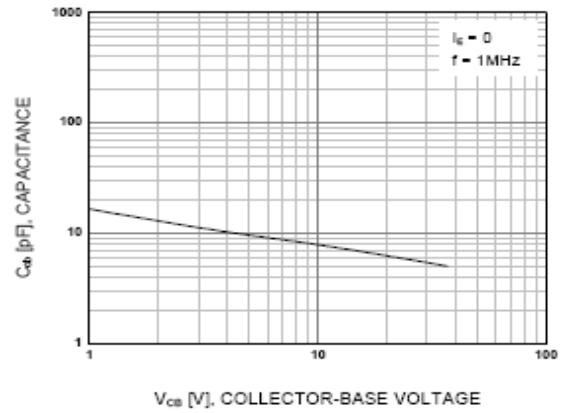

Figure 5. Collector Output Capacitance

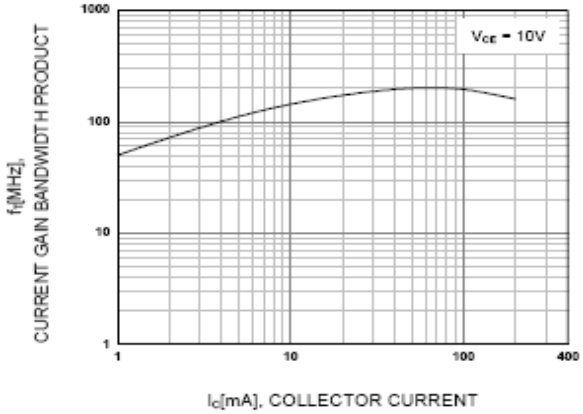

Figure 6. Current Gain Bandwidth Product

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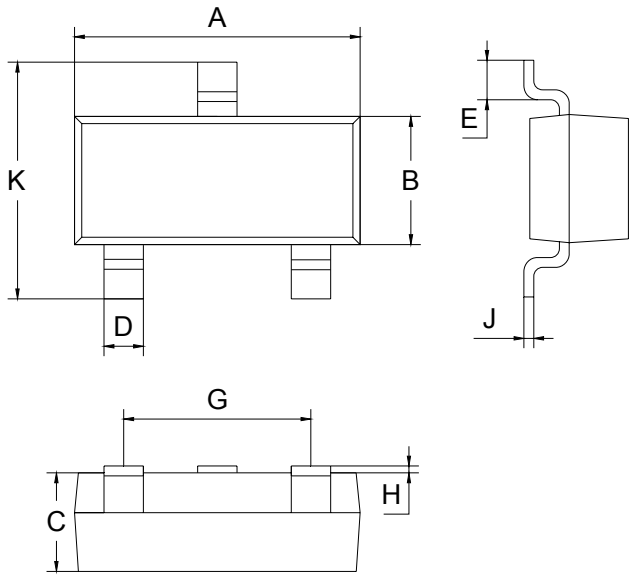
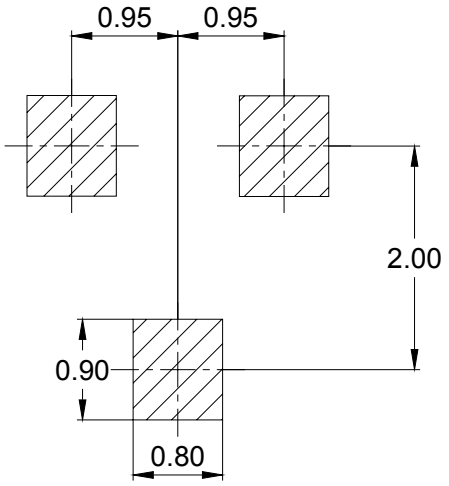
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
SS8050	SOT-23	3000/Tape&Reel