

Features

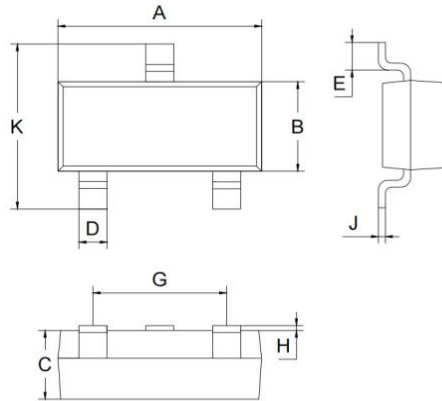
- Collector Current.(IC= 1.5A) .
- Complementary To SS8550.
- Collector dissipation:PC=300mW(TC=25 C).



1. BASE
2. EMITTER
3. COLLECTOR

Applications

- High Collector Current.



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		

Ordering Information

Type No.	Marking	Package Code
SS8050	Y1	SOT-23

MAXIMUM RATING @ Ta=25C 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	300	mW
T _j , T _{stg}	Junction and Storage Temperature	-55 to +150	°C



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	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

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

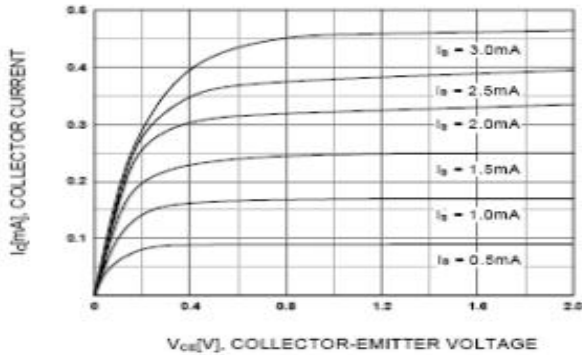


Figure 1. Static Characteristic

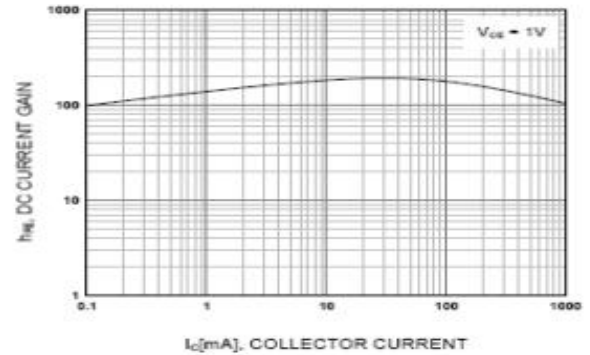


Figure 2. DC current Gain

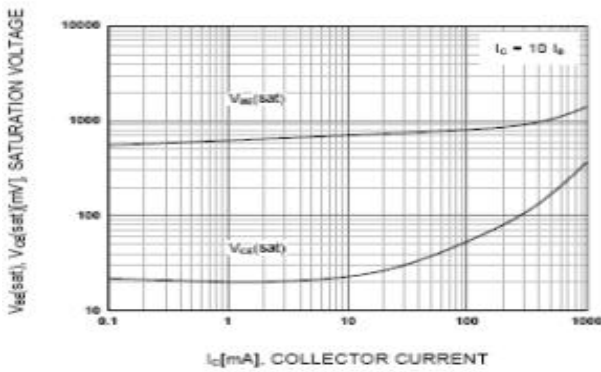


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

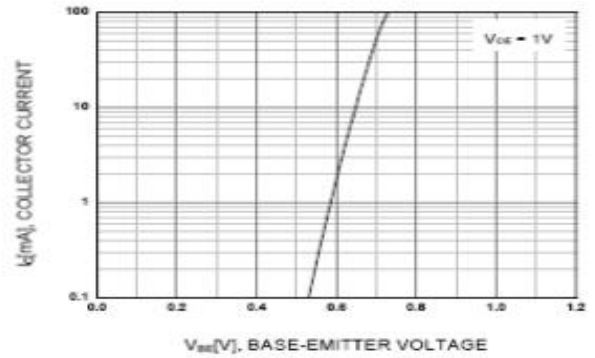


Figure 4. Base-Emitter On Voltage

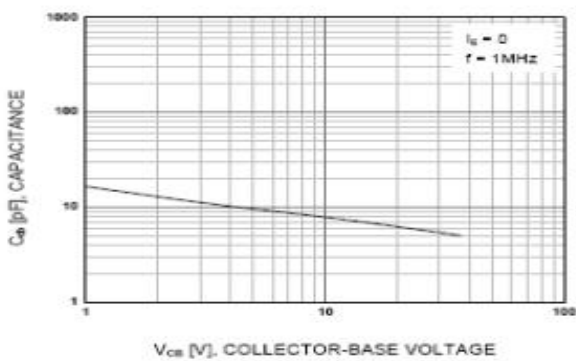


Figure 5. Collector Output Capacitance

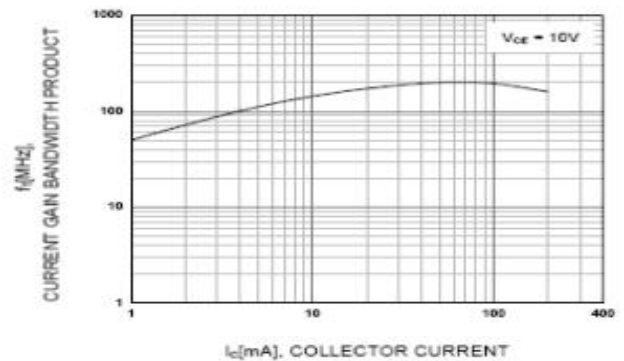


Figure 6. Current Gain Bandwidth Product

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