

<p>NPN型 小功率 贴片高压三极管 NPN High Voltage Transistor SMD</p>	<p>SS8050 对应其他工业型号</p>
<ul style="list-style-type: none"> <li>■ Transistor Polarity: NPN</li> <li>■ Transistor pinout: BEC</li> <li>■ SOT-23 Package</li> <li>■ Marking Code: Y1</li> <li>■ hFE: 100~200, 200~300</li> <li>■ Ldeal for Medium Power Amplification and Switching</li> </ul>	

<p>Inner circuit</p>  <p>SOT-23 内部结构</p>	<p>SS8050</p>  <p>1. Base 2. Emitter 3. Collector</p> <p>SOT-23 管脚排列</p>	<p>元件标识 (打印)</p>  <p>DEVICE MARKING:</p>
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■ CLASSIFICATION OF hFE

RANK	L	H
RANGE	100~200	200~300

MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	40	V
$V_{CEO}$	Collector-Emitter Voltage	25	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_c$	Collector Current	1500	mA
$P_c$	Collector Power Dissipation	300	mW
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	°C

**■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)**

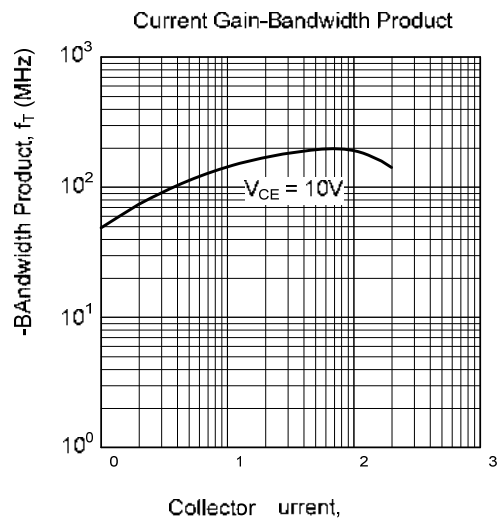
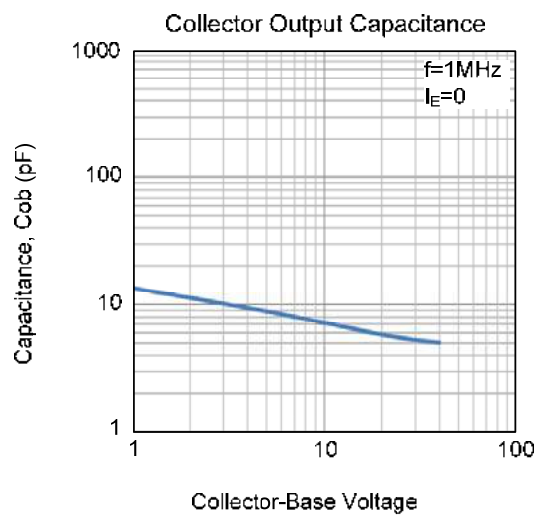
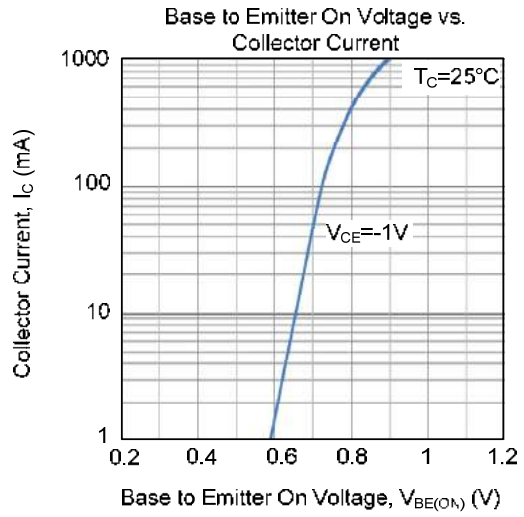
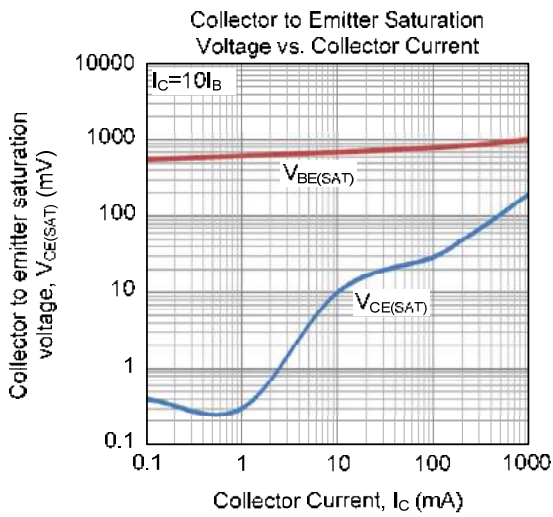
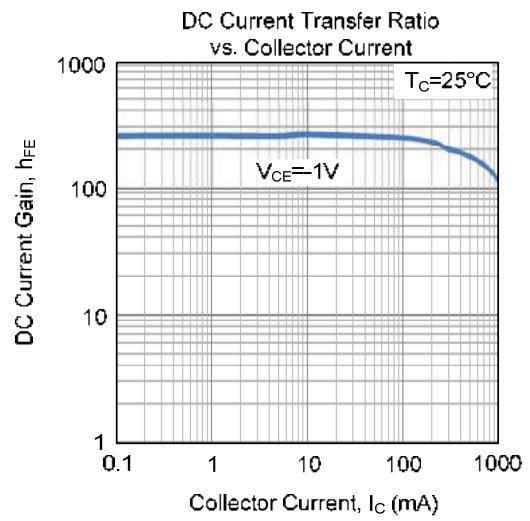
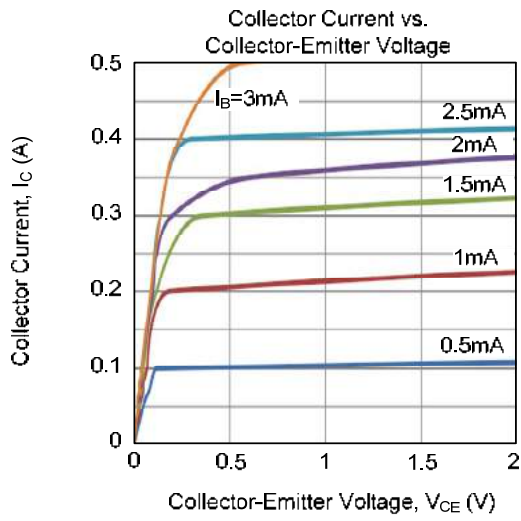
Characteristic	Test Condition	Symbol	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	I <sub>B</sub> =0, I <sub>C</sub> = 1mA	V <sub>(BR)CEO</sub>	25	--	--	V
Collector-Base Breakdown Voltage	I <sub>E</sub> =0, I <sub>C</sub> = 100μA	V <sub>(BR)CBO</sub>	40	--	--	V
Emitter-Base Breakdown Voltage	I <sub>E</sub> =0, I <sub>C</sub> = 10μA	V <sub>(BR)EBO</sub>	6	--	--	V
Emitter Cutoff Current	V <sub>CE</sub> = 3V, V <sub>EB</sub> = 0.4V	I <sub>BEO</sub>	--	--	50	μA
Collector Cutoff Current	V <sub>CE</sub> = 120V, V <sub>EB</sub> = 0.4V	I <sub>CBO</sub>	--	--	50	μA
DC Current Gain	I <sub>C</sub> = 1mA, V <sub>CE</sub> = 5V	hFE	50	--	--	
	I <sub>C</sub> = 10mA, V <sub>CE</sub> = 5V	hFE	60	--	--	
	I <sub>C</sub> =-50mA, V <sub>CE</sub> =-5V	hFE	30	--	--	
Collector-Emitter Saturation Voltage	I <sub>C</sub> = 10mA, I <sub>B</sub> = 1mA	V <sub>CE(sat)</sub>	--	--	0.2	V
	I <sub>C</sub> = 50mA, I <sub>B</sub> = 10mA	V <sub>CE(sat)</sub>	--	--	0.5	V
Base -Emitter Saturation Voltage	I <sub>C</sub> = 150mA, I <sub>B</sub> = 1mA	V <sub>BE(sat)</sub>	--	--	1.0	V
	I <sub>C</sub> = 50mA, I <sub>B</sub> = 5mA	V <sub>BE(sat)</sub>	--	--	1.0	V
Current-Gain-Bandwidth Product	I <sub>C</sub> = 10mA, V <sub>CE</sub> = 10V, f=100MHz	f <sub>T</sub>	100	--	300	MHz
Output Capacitance	V <sub>CB</sub> = 10V, I <sub>E</sub> =0, f=1MHz	C <sub>obo</sub>	--	--	6.0	pF
Small-Signal Current Gain	I <sub>C</sub> = 1mA, V <sub>CE</sub> = 10V, f=1kHz	hFE	40	--	200	
Noise Figure	V <sub>CE</sub> = 5V, I <sub>C</sub> = 200μA, R <sub>s</sub> =1KΩ, f=1.0KHz	NF	--	--	8.0	dB

1. FR-5 = 1.0 × 0.75 × 0.062 in.

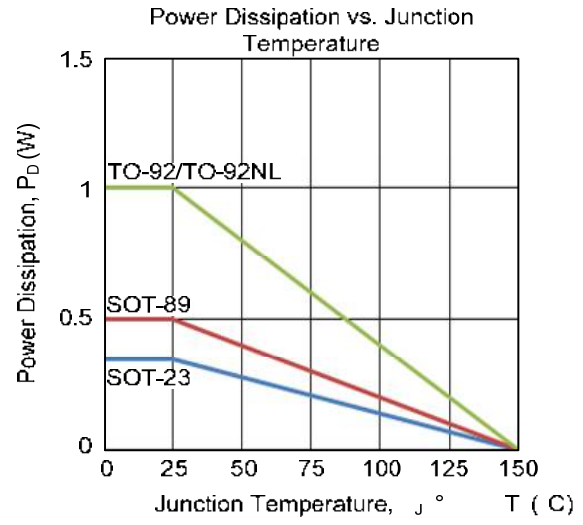
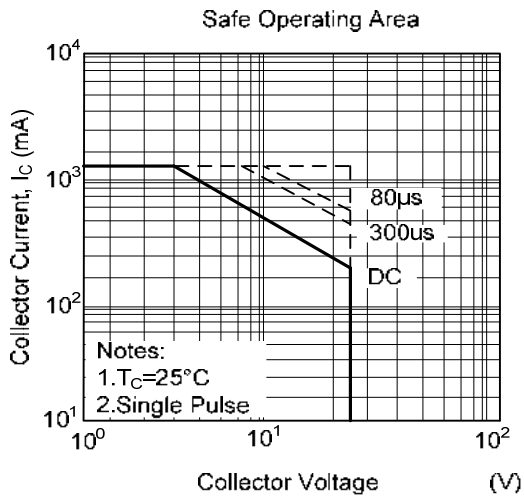
2. Alumina = 0.4 × 0.3 × 0.024 in. 99.5% alumina.

3. Pulse Width ≤ 300us; Duty Cycle ≤ 2.0%.

■ TYPICAL CHARACTERISTICS

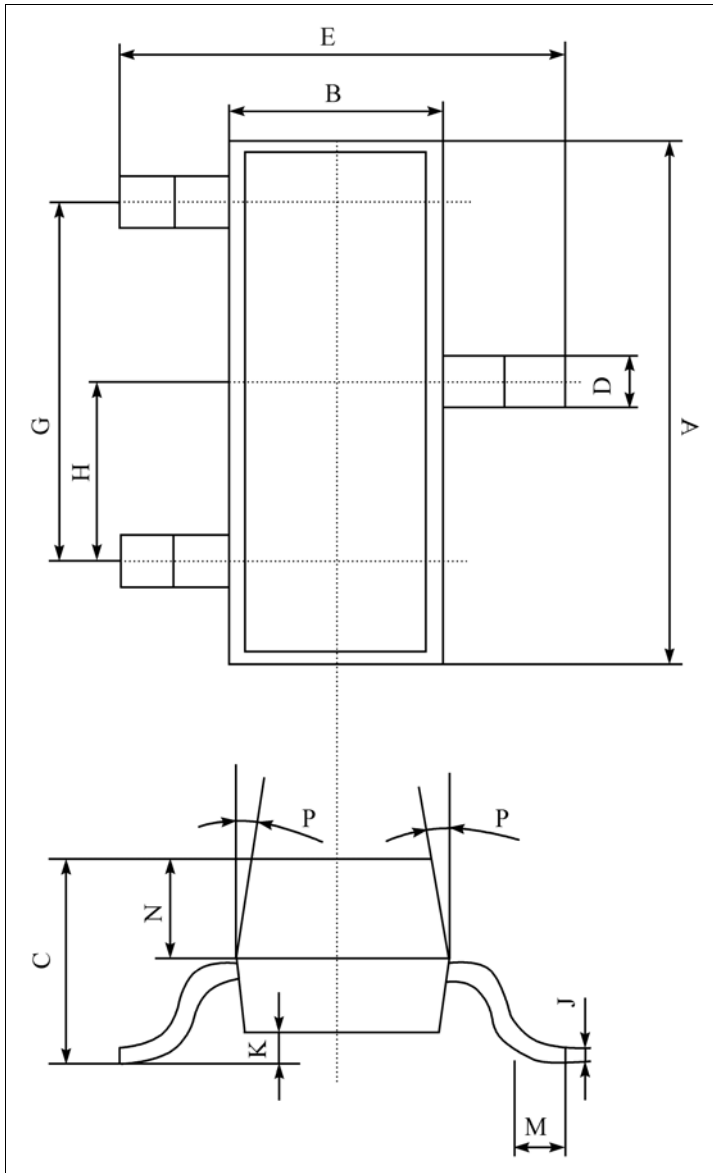


■ TYPICAL CHARACTERISTICS (Cont.)



■ DIMENSION

单位 (UNIT) : mm

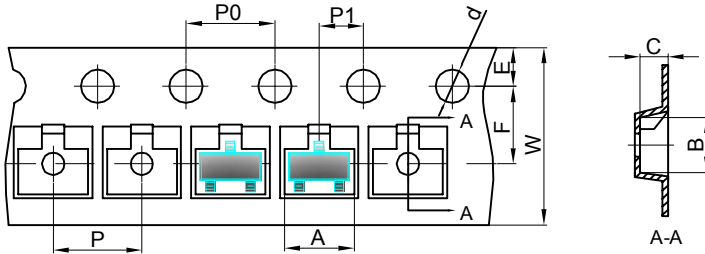


序号	数值及公差
A	2.90±0.10
B	1.30±0.10
C	1.00±0.10
D	0.40±0.10
E	2.40±0.20
G	1.90±0.10
H	0.95±0.05
J	0.13±0.05
K	0.00-0.10
M	≥0.20
N	0.60±0.10
P	7±2°

Packing  
SOT-23 包装规格  
SMD片式表面贴封装  
包装方式: 载带卷盘包装  
Tape & Reel, 3Kpcs/Reel  
每卷数量3000只 (3Kpcs/Reel)  
每盒数量45000只 (45Kpcs/BOX)  
每箱数量180000只 (180Kpcs/Cartons)

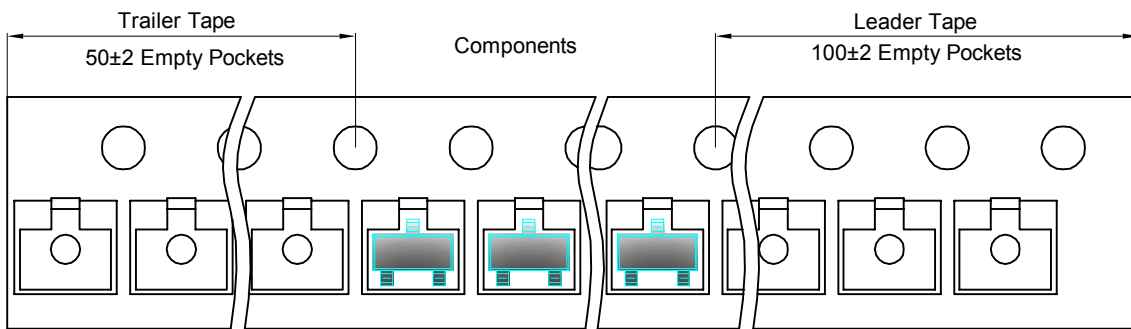
## SOT-23 Tape and reel

SOT-23 Embossed Carrier Tape

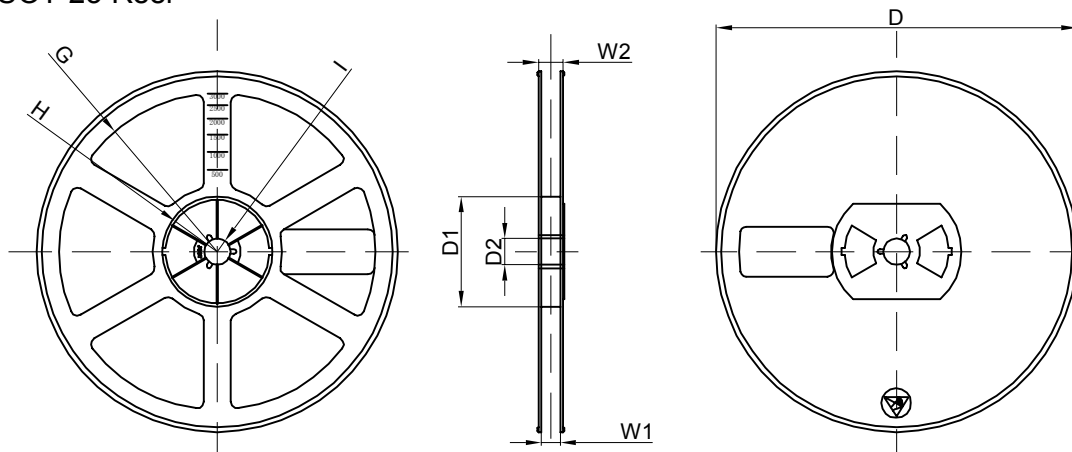


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

## SOT-23 Tape Leader and Trailer



## SOT-23 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

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	192×192×193	180,000 pcs	404×404×214	