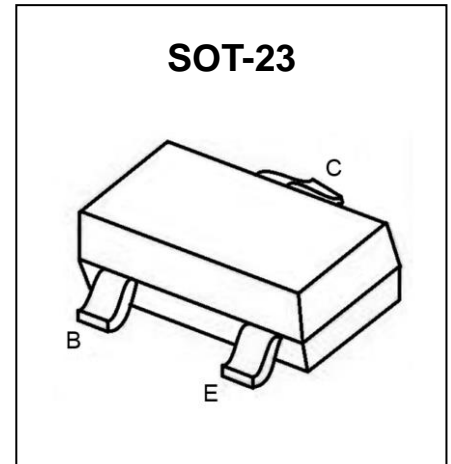




**S8050 Transistor(NPN)**

**Feature**

- Good current characters
- Small saturable voltage drop
- High Breakdown voltage



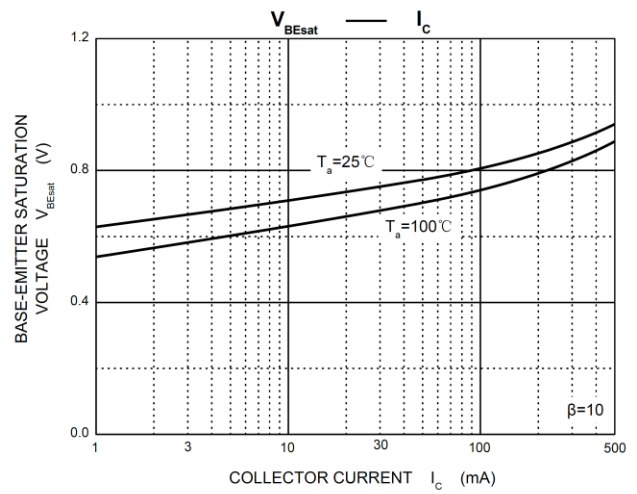
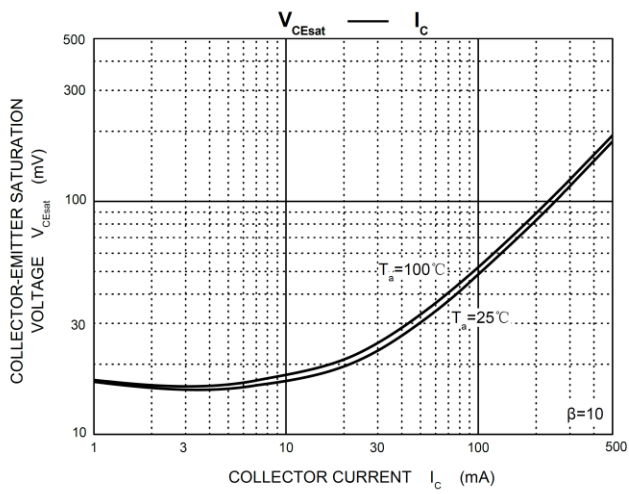
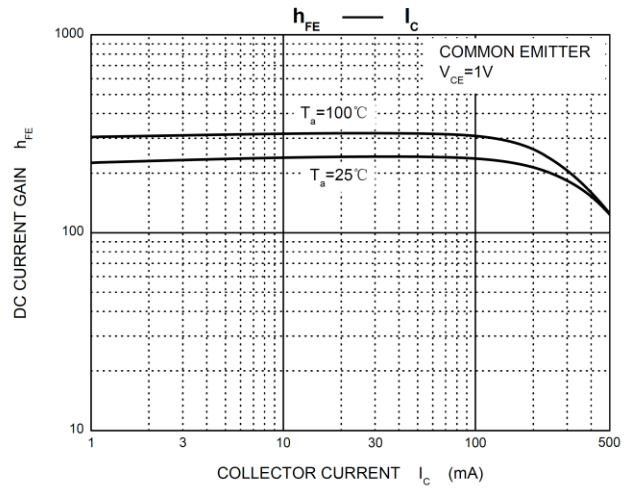
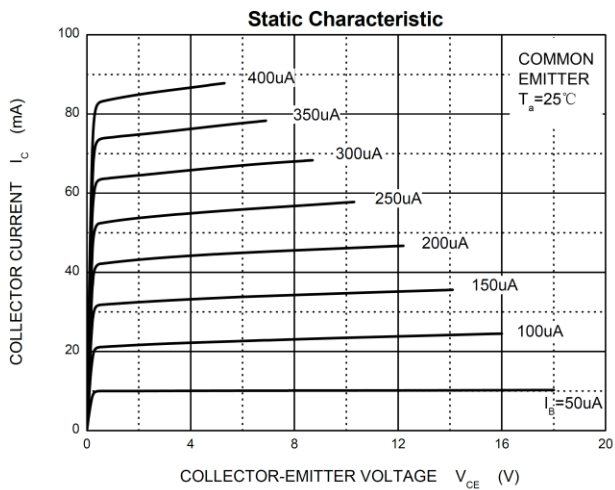
**MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)**

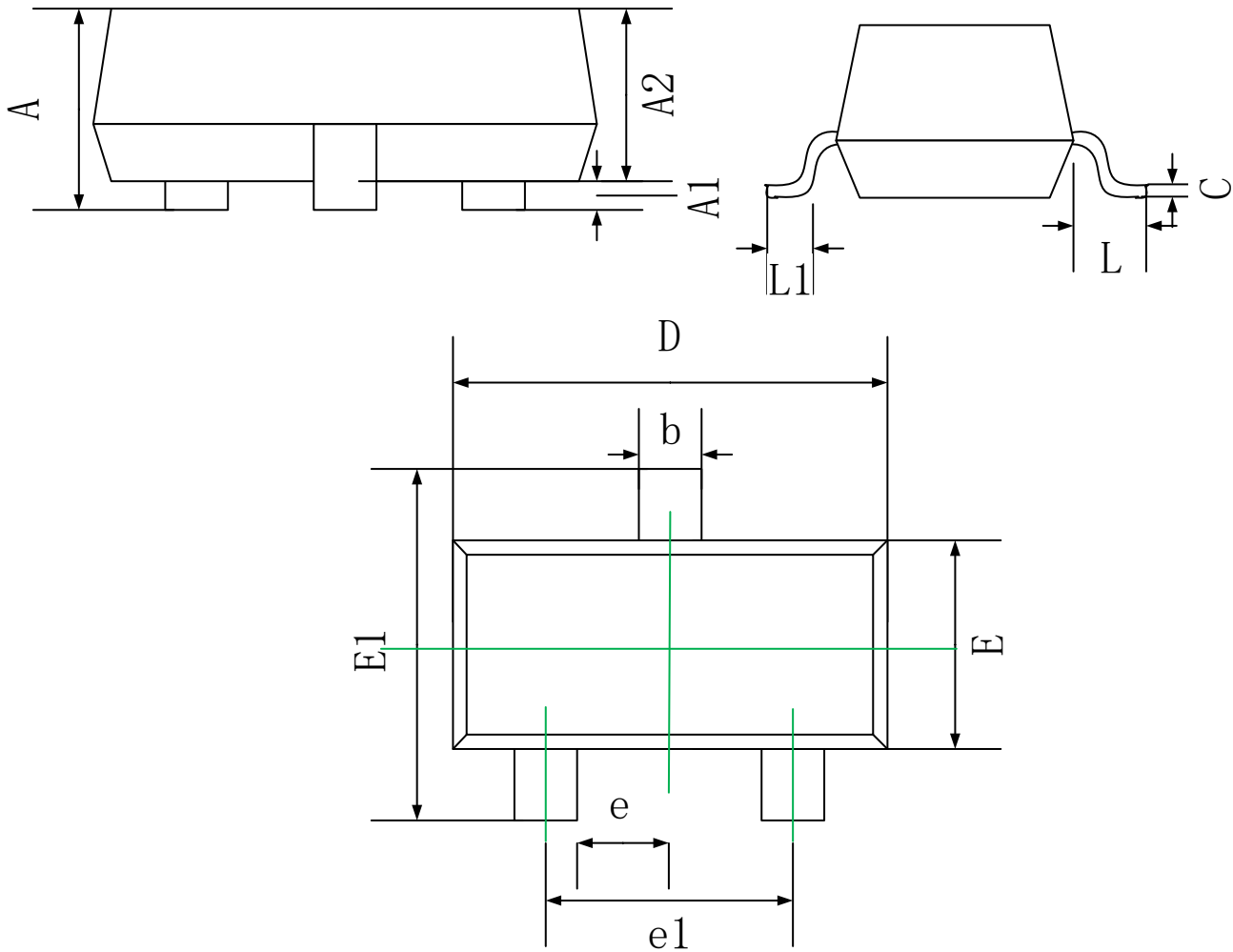
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V <sub>CB0</sub>	40	V
Collector-Emitter Voltage	V <sub>CEO</sub>	25	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current -Continuous	I <sub>c</sub>	0.5	A
Power Dissipation	P <sub>d</sub>	0.625	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55~ +150	°C

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

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>c</sub> =100μA ,I <sub>E</sub> =0	40		V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>c</sub> =1mA , I <sub>B</sub> =0	25		V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100μA, I <sub>c</sub> =0	5		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =40V, I <sub>E</sub> =0		100	nA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> =20V, I <sub>B</sub> =0		100	nA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>c</sub> =0		100	nA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =1V, I <sub>c</sub> =100mA	200	350	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> =500mA, I <sub>B</sub> =50mA		0.6	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> =500mA, I <sub>B</sub> =50mA		1.2	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 6V, I <sub>c</sub> =20mA, f=30MHz	150		MHZ

**Typical Characteristics**



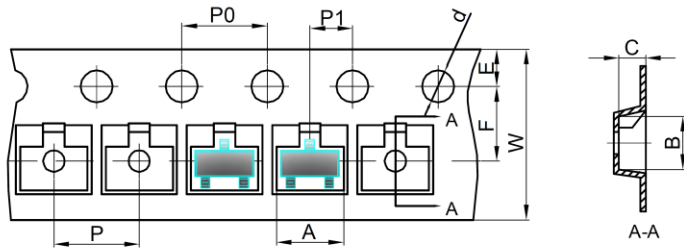
**SOT-23 Package Information**


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50

SOT-23 Tape and Reel

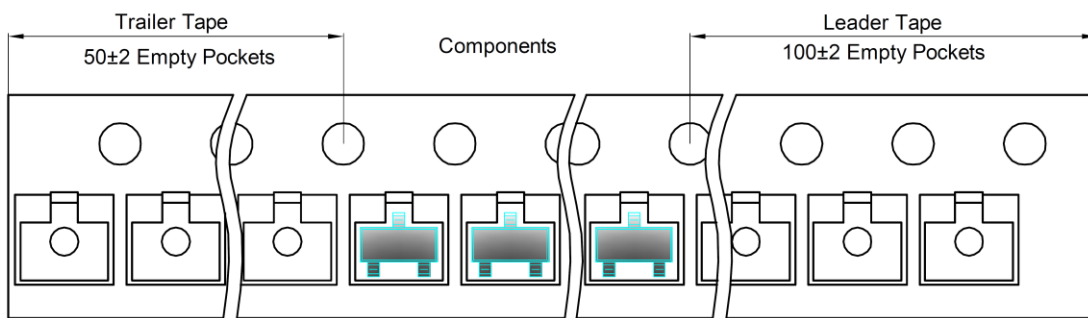
### SOT-23 Tape and reel

SOT-23 Embossed Carrier Tape

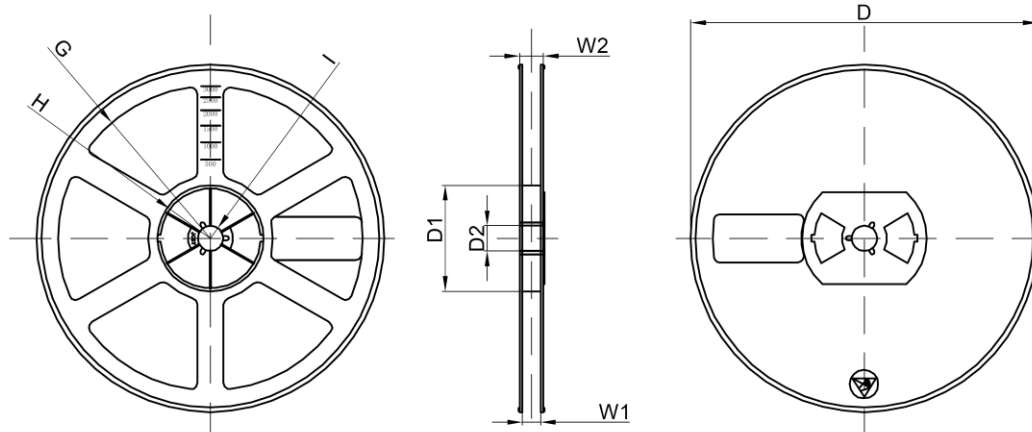


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

### 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	30,000 pcs	203×203×195	120,000 pcs	438×438×220	