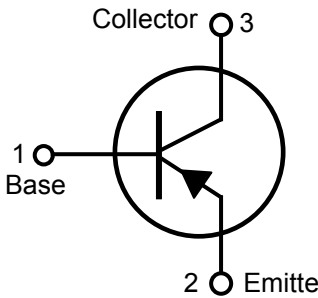
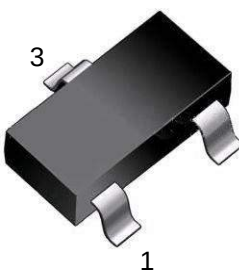


PNP型 小功率 贴片三极管 PNP High Voltage Transistor SMD	PBSS5120T 对应其他工业型号
■ Transistor Polarity: PNP ■ Transistor pinout: BEC ■ SOT-23 Package ■ Marking Code: Y2 ■ hFE: 100~200, 200~300 ■ Ideal for Medium Power Amplification and Switching	

Inner circuit  SOT-23 内部结构	PBSS5120T  SOT-23 管脚排列	元件标识 (打印)  DEVICE MARKING:
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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 ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

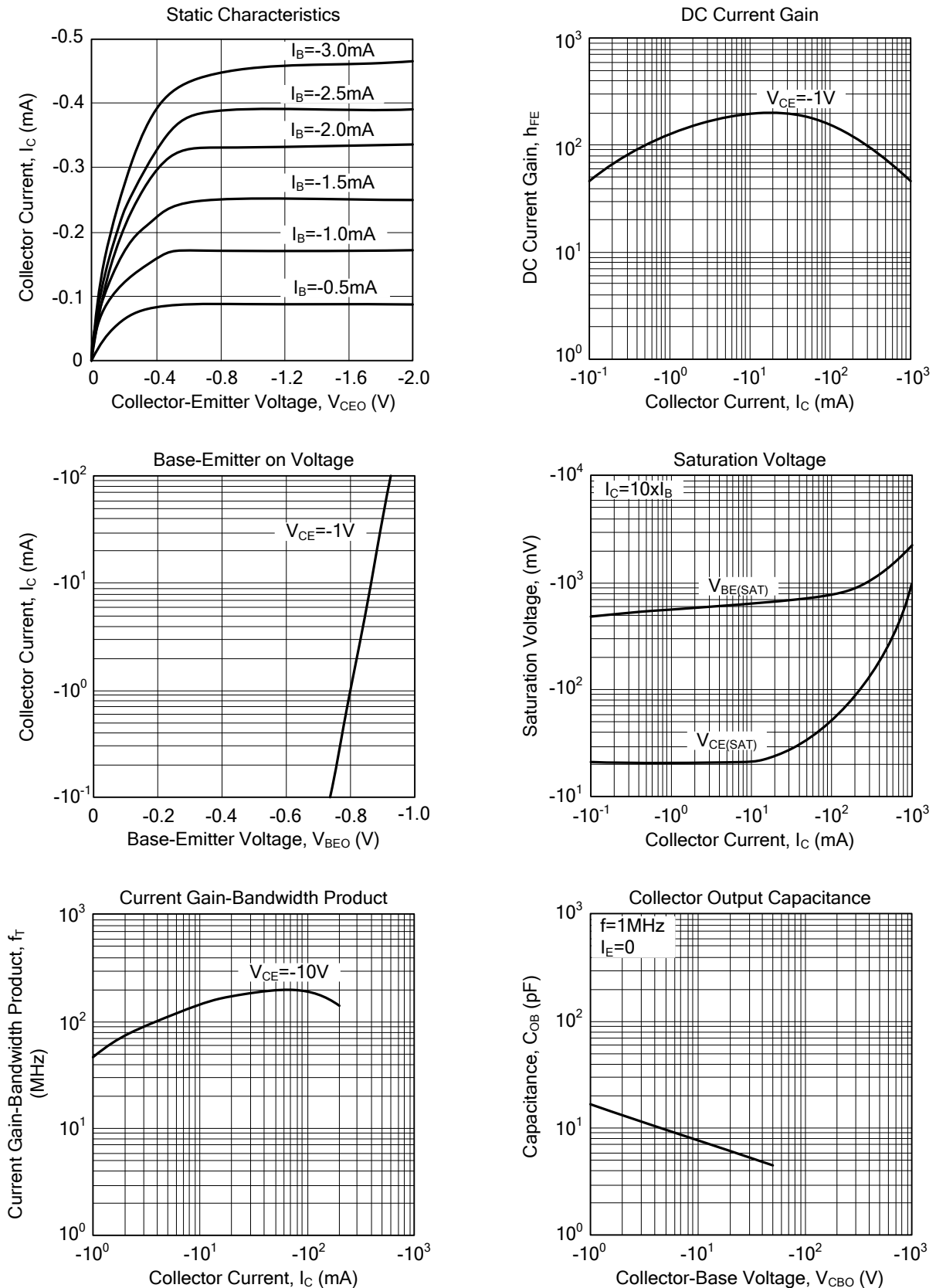
Characteristic	Test Condition	Symbol	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	$I_B=0, I_C=-1\text{mA}$	$V_{(BR)CEO}$	-25	--	--	V
Collector-Base Breakdown Voltage	$I_E=0, I_C=-100\mu\text{A}$	$V_{(BR)CBO}$	-40	--	--	V
Emitter-Base Breakdown Voltage	$I_E=0, I_C=-10\mu\text{A}$	$V_{(BR)EBO}$	-6	--	--	V
Emitter Cutoff Current	$V_{CE}=-3\text{V}, V_{EB}=-0.4\text{V}$	I_{BEO}	--	--	-50	μA
Collector Cutoff Current	$V_{CE}=-120\text{V}, V_{EB}=-0.4\text{V}$	I_{CBO}	--	--	-50	μA
DC Current Gain	$I_C=-1\text{mA}, V_{CE}=-5\text{V}$	h_{FE}	50	--	--	
	$I_C=-10\text{mA}, V_{CE}=-5\text{V}$	h_{FE}	60	--	--	
	$I_C=-50\text{mA}, V_{CE}=-5\text{V}$	h_{FE}	30	--	--	
Collector-Emitter Saturation Voltage	$I_C=-10\text{mA}, I_B=-1\text{mA}$	$V_{CE(sat)}$	--	--	-0.2	V
	$I_C=-50\text{mA}, I_B=-10\text{mA}$	$V_{CE(sat)}$	--	--	-0.5	V
Base -Emitter Saturation Voltage	$I_C=-150\text{mA}, I_B=-1\text{mA}$	$V_{BE(sat)}$	--	--	-1.0	V
	$I_C=-50\text{mA}, I_B=-5\text{mA}$	$V_{BE(sat)}$	--	--	-1.0	V
Current-Gain-Bandwidth Product	$I_C=-10\text{mA}, V_{CE}=-10\text{V}, f=100\text{MHz}$	f_T	100	--	300	MHz
Output Capacitance	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$	C_{obo}	--	--	6.0	pF
Small-Signal Current Gain	$I_C=-1\text{mA}, V_{CE}=-10\text{V}, f=1\text{kHz}$	h_{FE}	40	--	200	
Noise Figure	$V_{CE}=-5\text{V}, I_C=-200\mu\text{A}, R_s=1\text{K}\Omega, f=1.0\text{KHz}$	NF	--	--	8.0	dB

1. $FR-5 = 1.0 \times 0.75 \times 0.062 \text{ in.}$

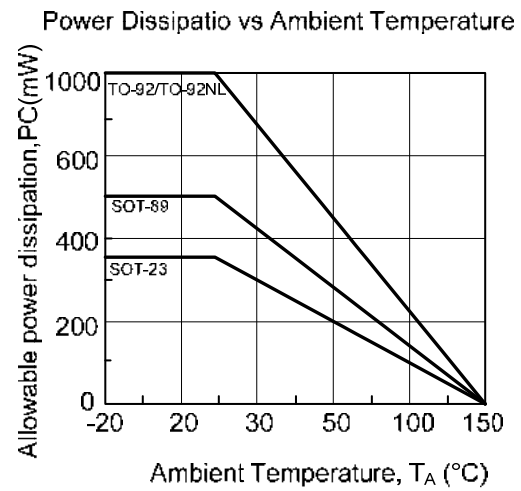
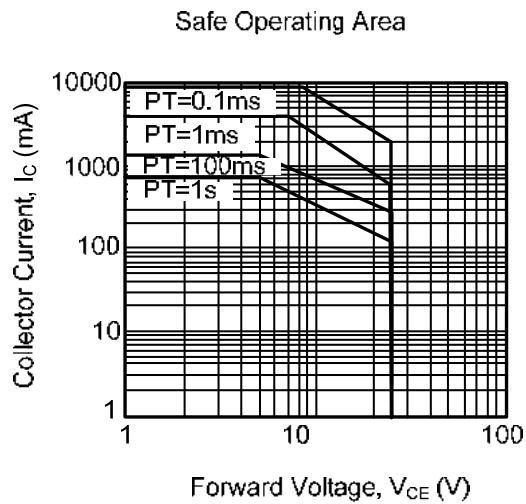
2. $\text{Alumina} = 0.4 \times 0.3 \times 0.024 \text{ in. } 99.5\% \text{ alumina.}$

3. $\text{Pulse Width} \leq 300\mu\text{s}; \text{Duty Cycle} \leq 2.0\%.$

■ TYPICAL CHARACTERISTICS

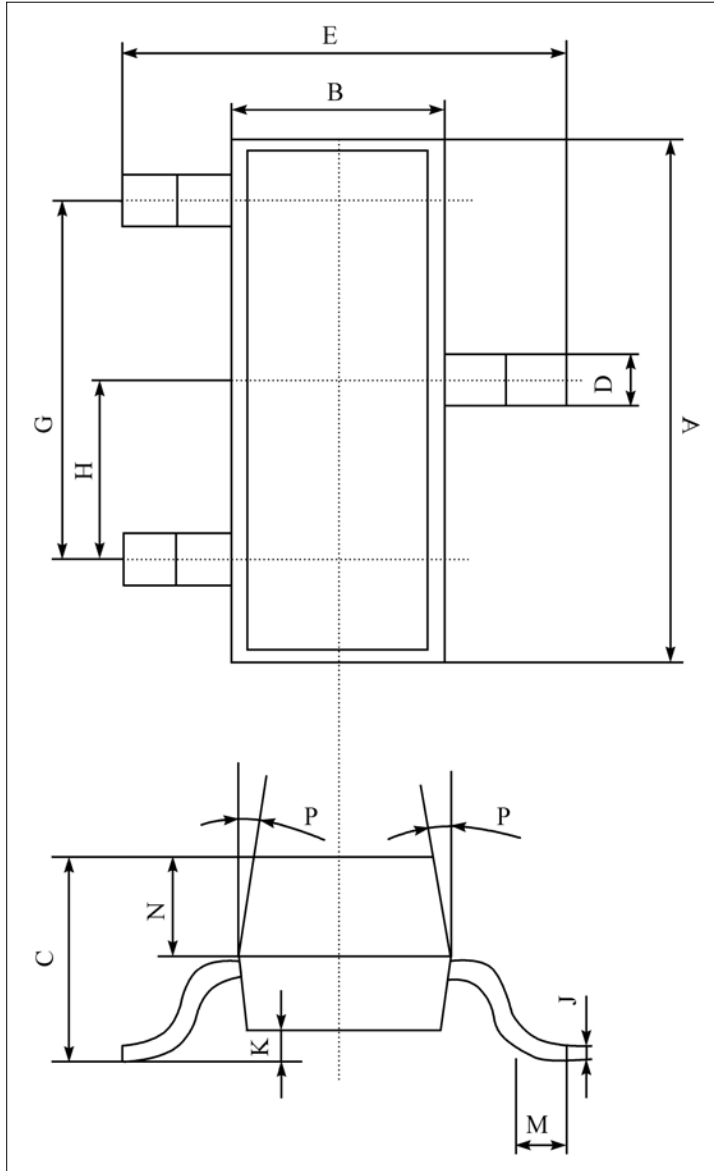


■ TYPICAL CHARACTERISTICS (Cont.)



■ DIMENSION

单位 (UNIT) : mm

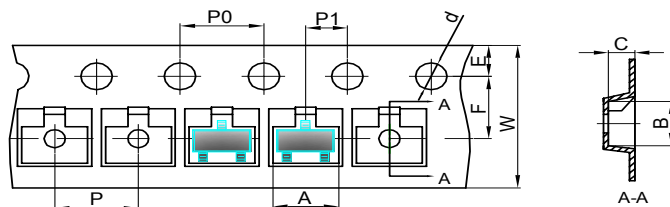


序号	数值及公差
A	2.90±0.10
B	1.30±0.10
C	1.00±0.10
D	0.40±0.10
E	2.40±0.20
G	1.90±0.10
H	0.95±0.05
J	0.13±0.05
K	0.00-0.10
M	≥0.20
N	0.60±0.10
P	7±2°

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 (30Kpcs/BOX)
每箱数量180000只 (180Kpcs/Cartons)

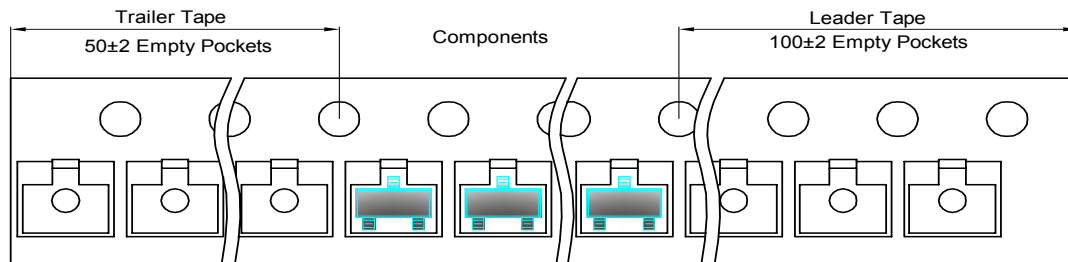
SOT-23 Tape and reel

SOT-23 Embossed Carrier Tape

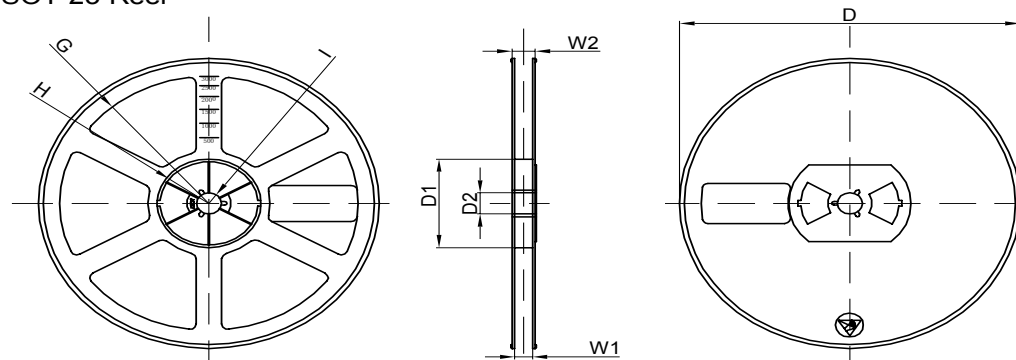


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

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	