Lastinght

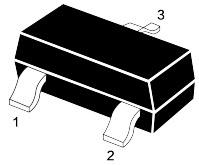
2SB709A

TRANSISTOR (PNP)

FEATURES

For general amplification

Complementary to 2SD601A



1. BASE
2. EMITTER
3. COLLECTOR

RoHS COMPLIANT Pb-Free

MARKING：BR1

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

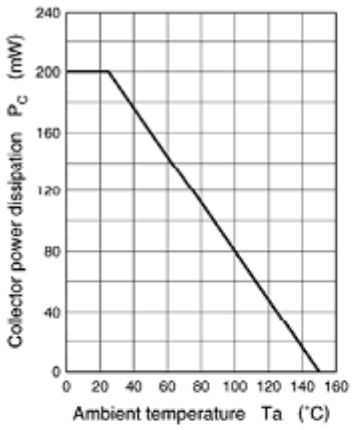
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-45	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current -Continuous	-100	mA
P_C	Collector Power Dissipation	200	mW
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

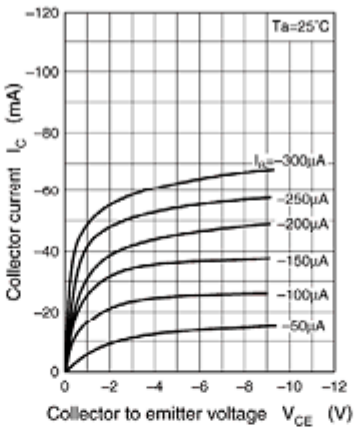
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -10μA, I_E=0	-45		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -2mA, I_B=0	-45		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -10μA, I_C=0	-7		V
Collector cut-off current	I_{CBO}	V_{CB}= -20 V, I_E=0		-0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}= -10V, I_B=0		-100	μA
DC current gain	h_{FE}	V_{CE}= -10V, I_C= -2mA	200	350	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=-100 mA, I_B= -10mA		-0.5	V
Transition frequency	f_T	V_{CE}= -10V, I_C= -1mA f=200MHz	60		MHz
Collector output capacitance	C_{ob}	V_{CB}= -10V, I_E= 0 f=1MHz		2.7	pF

Typical Characteristics

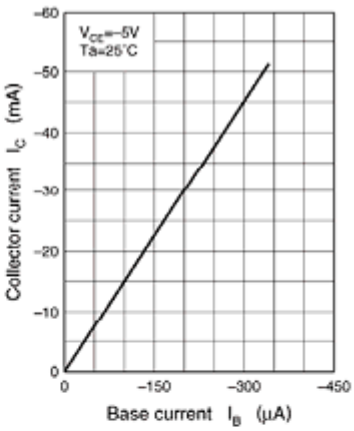
P_C — Ta



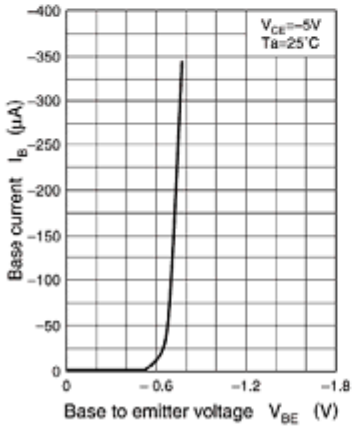
I_C — V_{CE}



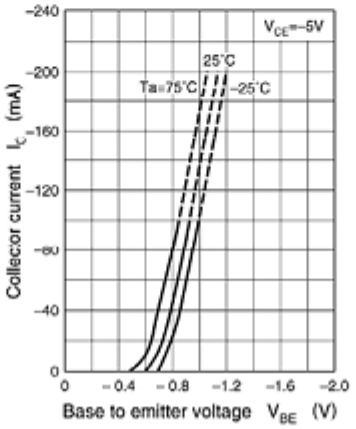
I_C — I_B



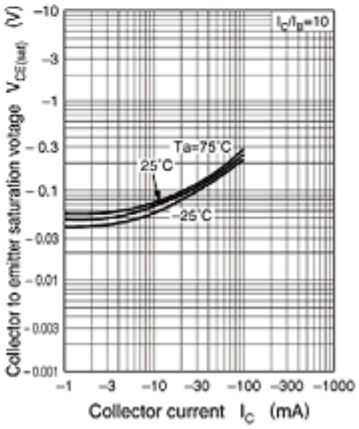
I_B — V_{BE}



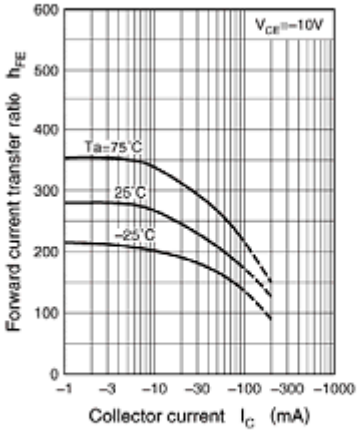
I_C — V_{BE}



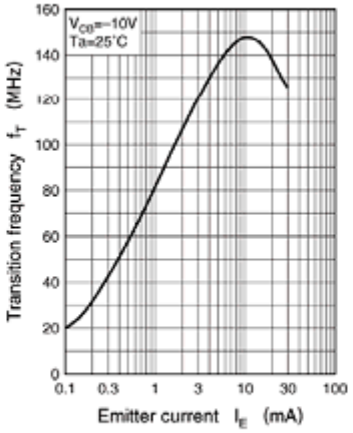
$V_{CE(sat)}$ — I_C



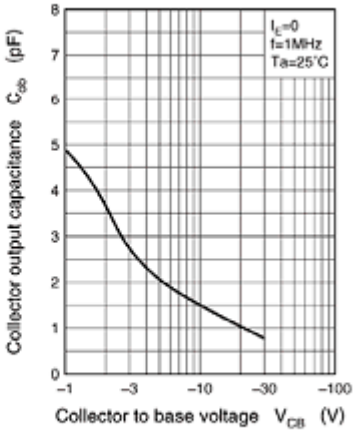
h_{FE} — I_C



f_T — I_E

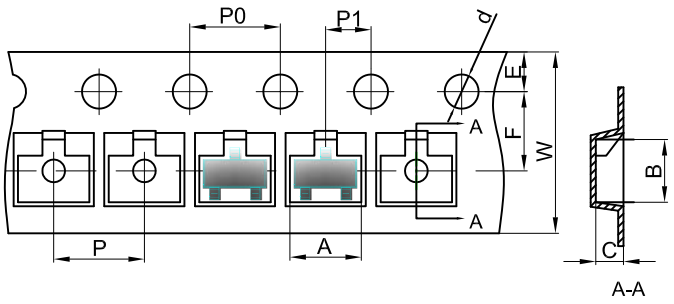


C_{ob} — V_{CB}



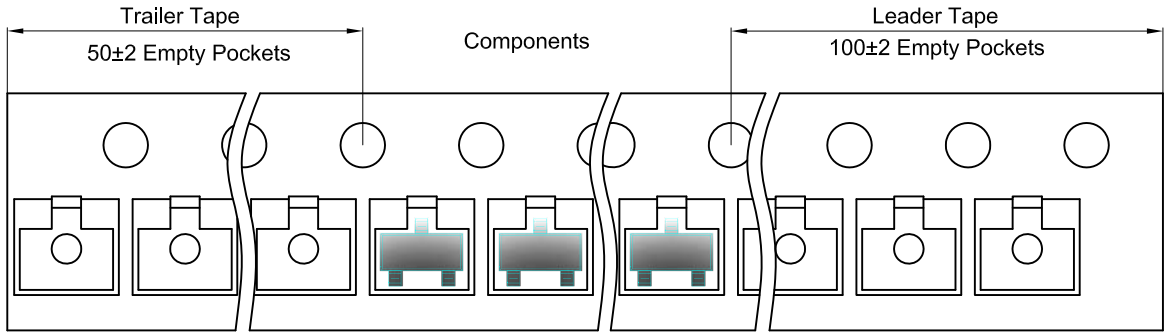
SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape

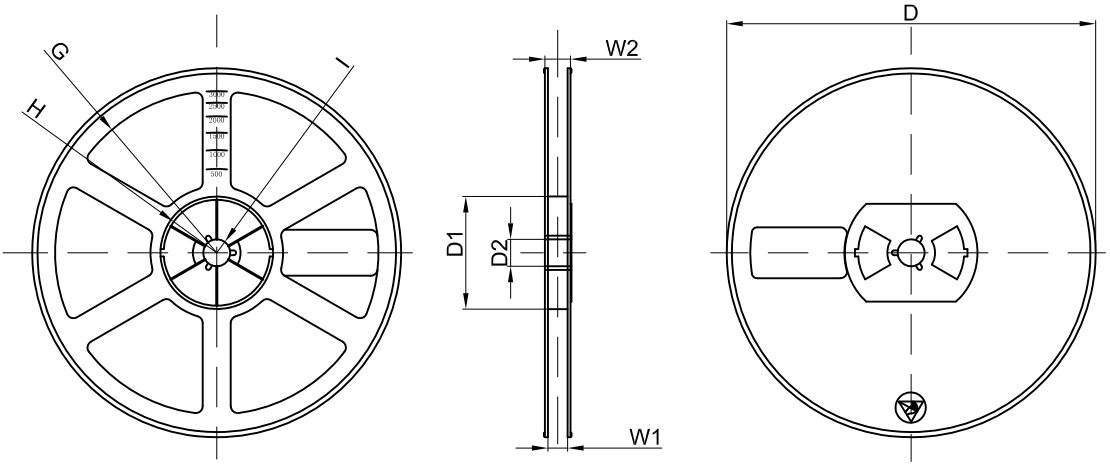


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer

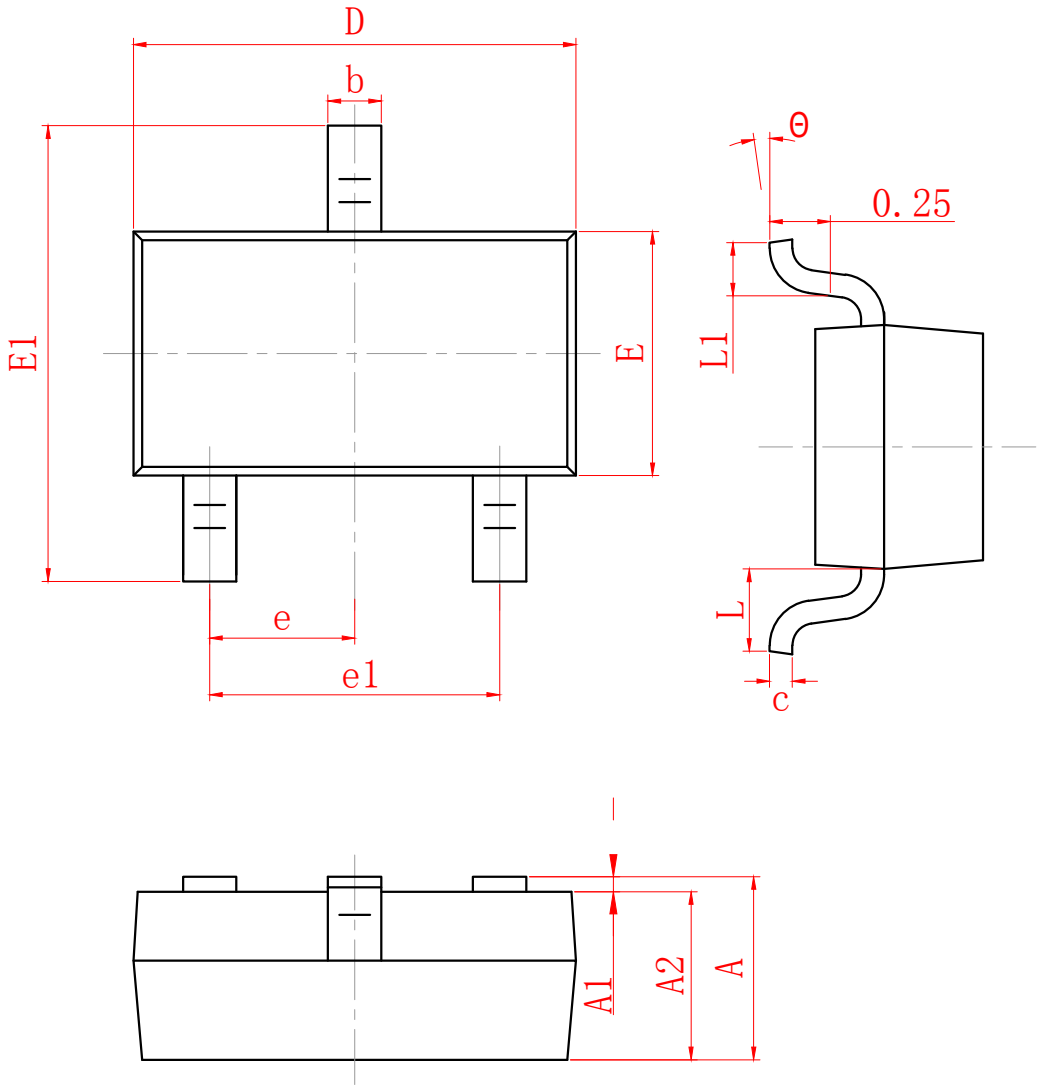


SOT-23 Reel



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	203×203×195	180,000 pcs	438×438×220	



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950 TYP	
e1	1.800	2.000
L	0.550 REF	
L1	0.300	0.500
θ	0°	8°

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