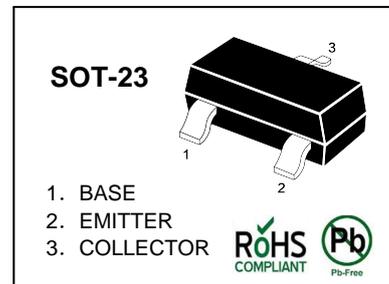


NPN Silicon Epitaxial Planar Transistor

Audio Frequency Power amplifier applications.

The transistor is subdivided into three group O, Y and G according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



Absolute Maximum Ratings (Ta=25 °C)

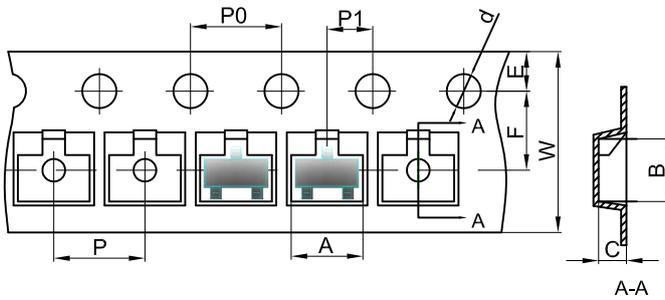
Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_s	-55 to +150	°C

Characteristics at $T_{amb}=25\text{ °C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=1V, I_C=100mA$					
Current Gain Group O	h_{FE}	90	-	180	-
Y	h_{FE}	135	-	270	-
G	h_{FE}	200	-	400	-
Collector Emitter Breakdown Voltage at $I_C=10mA$	$V_{(BR)CEO}$	30	-	-	V
Collector Base Breakdown Voltage at $I_C=100\mu A$	$V_{(BR)CBO}$	40	-	-	V
Emitter Base Breakdown Voltage at $I_E=100\mu A$	$V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current at $V_{CB}=30V$	I_{CBO}	-	-	0.1	μA
Collector Saturation Voltage at $I_C=1.0A, I_B=100mA$	$V_{CE(sat)}$	-	-	0.5	V
Base Saturation Voltage at $I_C=1.0A, I_B=100mA$	$V_{BE(sat)}$	-	-	1.2	V
Collector Output Capacitance at $V_{CB}=6V, f=1MHz$	C_{OB}	-	18	-	pF
Transition Frequency at $V_{CE}=6V, I_C=10mA$	f_T	-	130	-	MHz

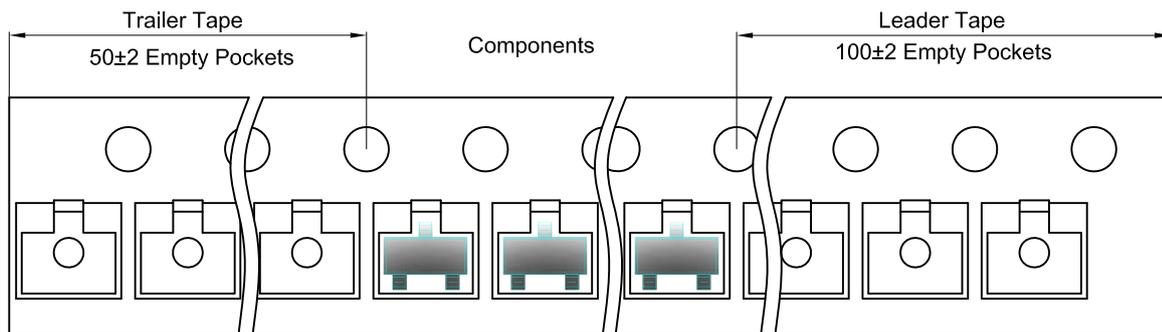
SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape

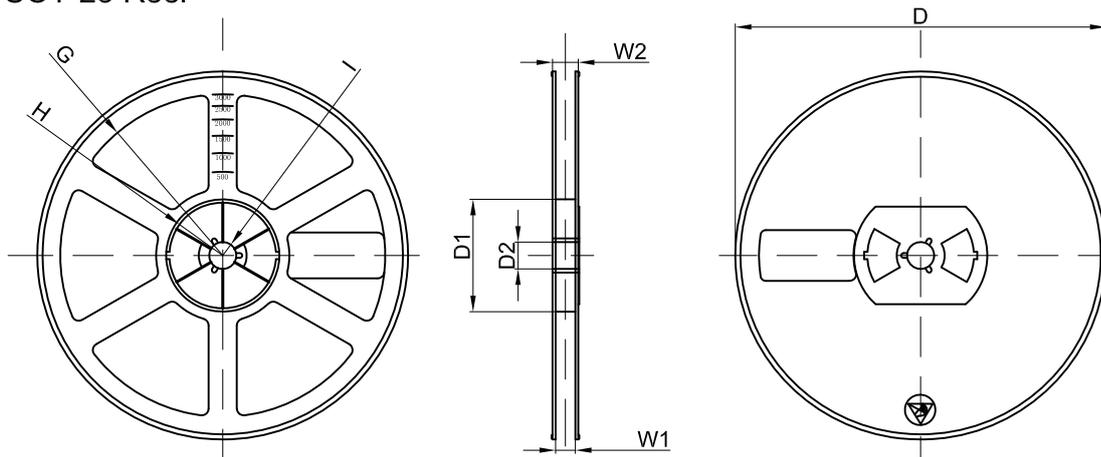


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer

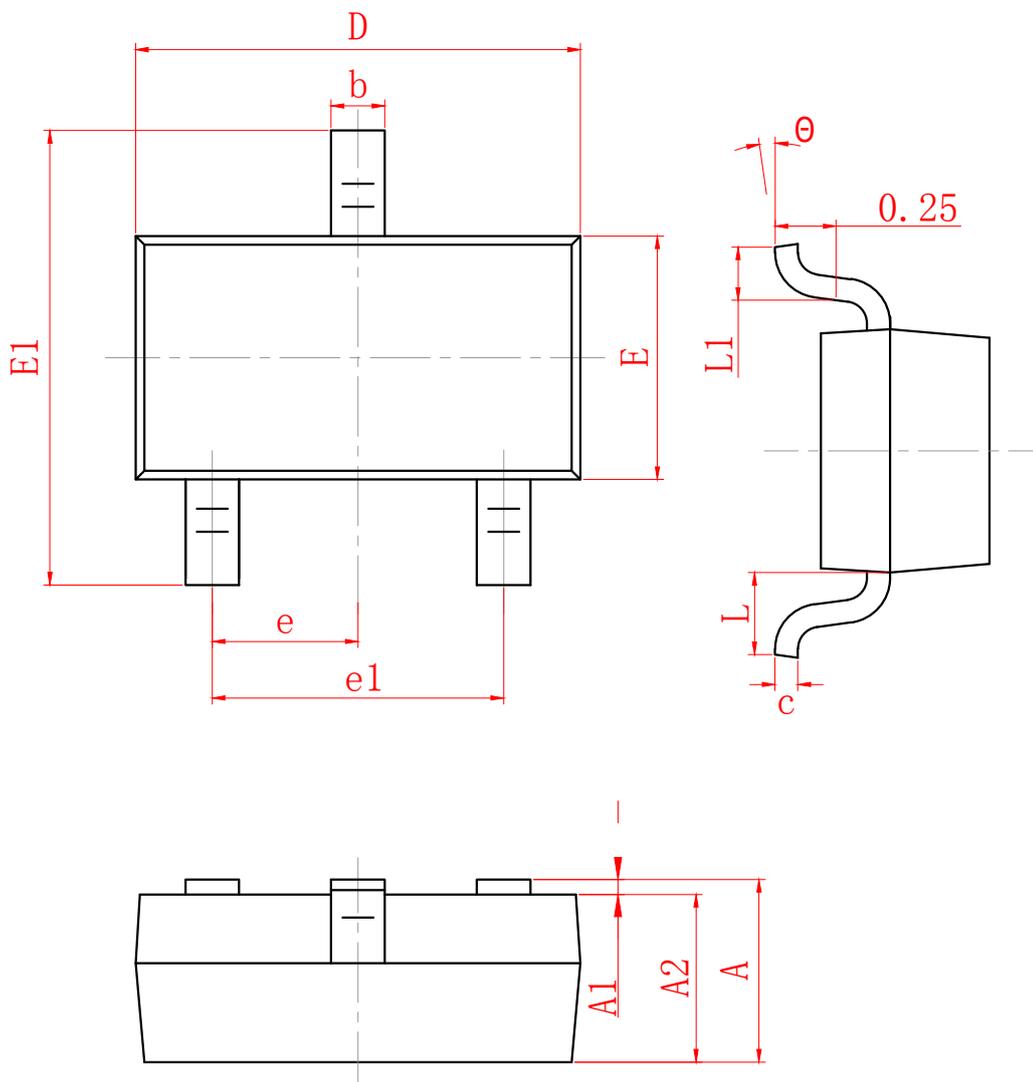


SOT-23 Reel



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
theta	0°	8°

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