

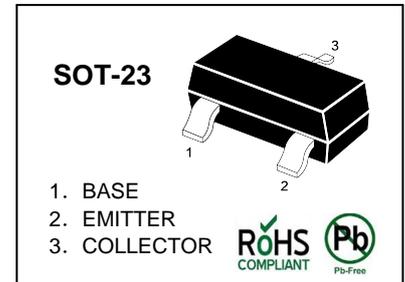
### PNP Silicon Epitaxial Planar Transistor

The transistor is subdivided into three groups Q, R and S according to its DC current gain.

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

#### Feature

- Excellent  $h_{FE}$  linearity



#### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

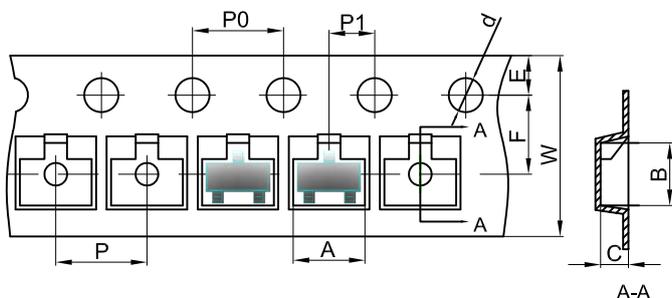
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	6	V
Collector Current	$-I_C$	150	mA
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{CE}=6V$ , $-I_C=1mA$	Q	$h_{FE}$	120	-	270	-
	R	$h_{FE}$	180	-	390	-
	S	$h_{FE}$	270	-	560	-
Collector Cutoff Current at $-V_{CB}=60V$		$-I_{CBO}$	-	-	0.1	$\mu A$
Emitter Cutoff Current at $-V_{EB}=6V$		$-I_{EBO}$	-	-	0.1	$\mu A$
Collector Saturation Voltage at $-I_C=50mA$ , $-I_B=5mA$		$-V_{CE(sat)}$	-	-	0.5	V
Collector Base Breakdown Voltage at $-I_C=50\mu A$		$-V_{(BR)CBO}$	60	-	-	V
Collector Emitter Breakdown Voltage at $-I_C=1mA$		$-V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage at $-I_E=50\mu A$		$-V_{(BR)EBO}$	6	-	-	V
Transition Frequency at $-V_{CE}=12V$ , $-I_E=2mA$ , $f=30MHz$		$f_T$	-	140	-	MHz
Output Capacitance at $-V_{CB}=12V$ , $f=1MHz$		Cob	-	4.0	5	pF

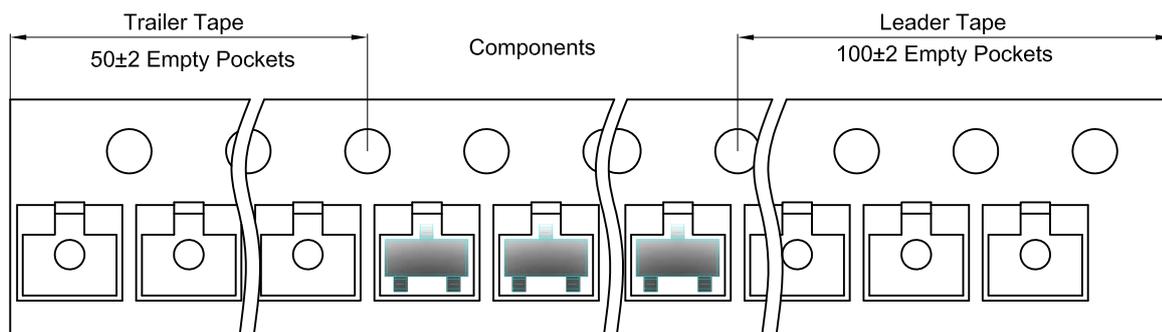
## SOT-23 Tape and Reel

### SOT-23 Embossed Carrier Tape

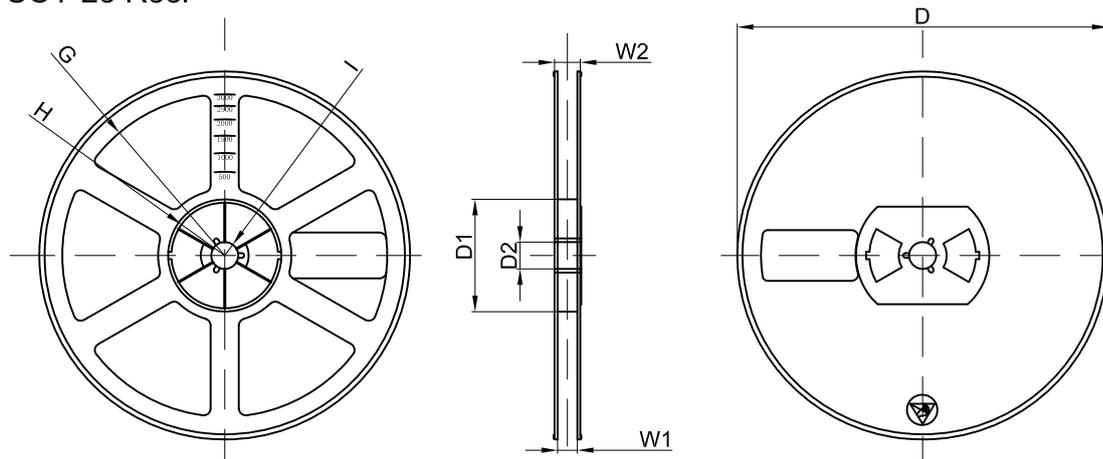


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

### 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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