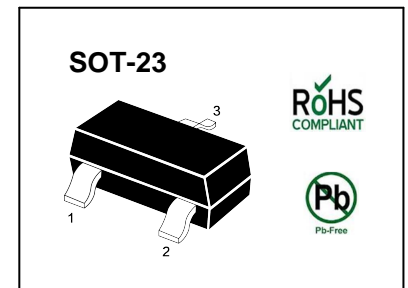
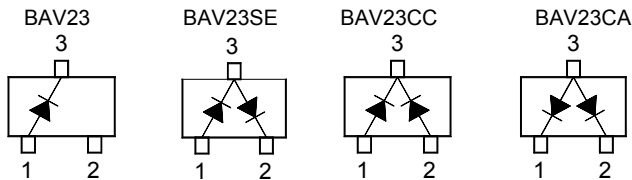


### Silicon Epitaxial Planar Diodes

High voltage switching diode



BAV23	Marking	Code:	<b>HC</b>
BAV23SE	Marking	Code:	<b>PY</b>
BAV23CC	Marking	Code:	<b>PZ</b>
BAV23CA	Marking	Code:	<b>RA</b>

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

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	$V_{RRM}$	250	V
Reverse Voltage	$V_R$	200	V
Forward Current	$I_{F(AV)}$	400	mA
Repetitive Peak Forward Current	$I_{FRM}$	625	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	1.7 3 9	A
		at $t = 10\text{ ms}$ at $t = 100\text{ }\mu\text{s}$ at $t = 1\text{ }\mu\text{s}$	
Power Dissipation	$P_{tot}$	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	$^{\circ}\text{C/W}$
Operating Junction and Storage Temperature Range	$T_j, T_{stg}$	- 65 to + 150	$^{\circ}\text{C}$

#### Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	250	-	V
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	$V_F$	- -	1 1.25	V
Reverse Current at $V_R = 200\text{ V}$ , $T_j = 25\text{ }^{\circ}\text{C}$ at $V_R = 200\text{ V}$ , $T_j = 150\text{ }^{\circ}\text{C}$	$I_R$	- -	100 100	nA $\mu\text{A}$
Total Capacitance at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$	$C_{tot}$	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}$ , $I_{rr} = 0.1 \times I_R$ , $R_L = 100\text{ }\Omega$	$t_{rr}$	-	50	ns

Typical Characteristics

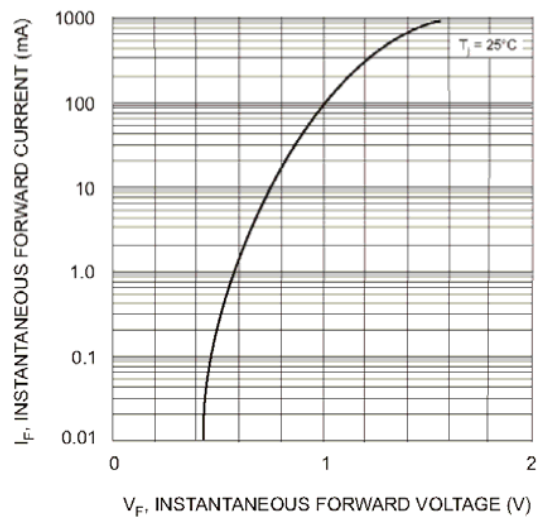


Fig. 1 Forward Characteristics

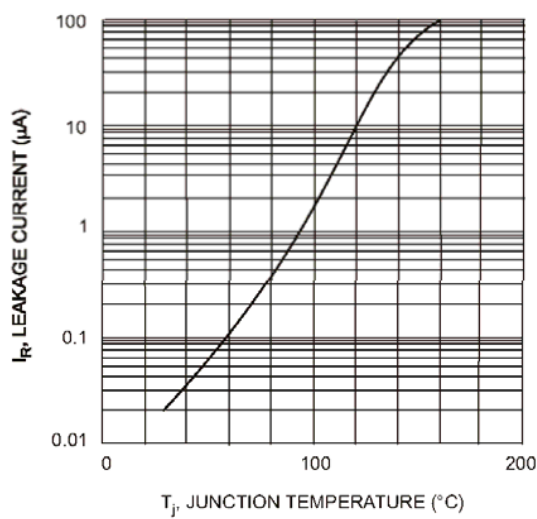
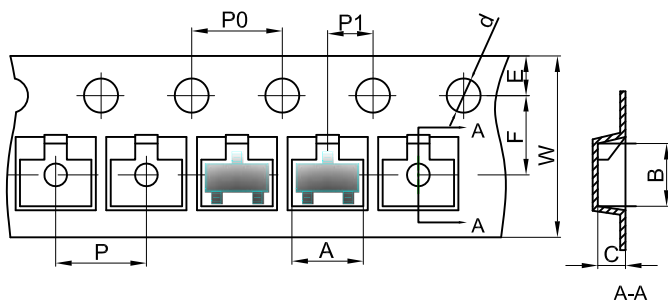


Fig. 2 Leakage Current vs Junction Temperature

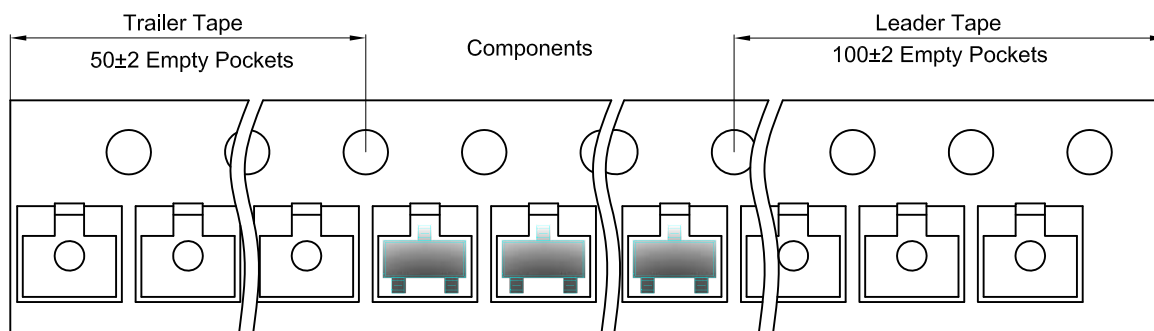
### SOT-23 Tape and Reel

#### SOT-23 Embossed Carrier Tape

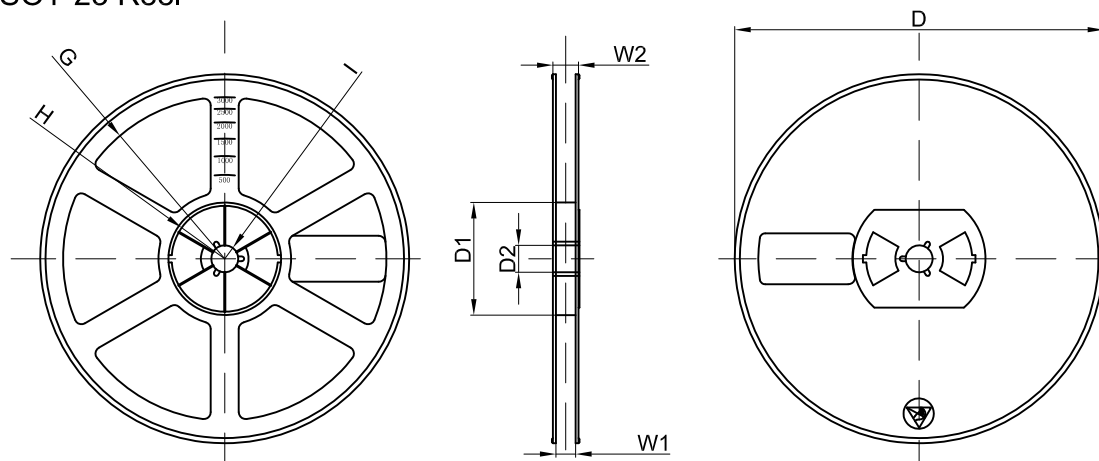


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

#### SOT-23 Tape Leader and Trailer

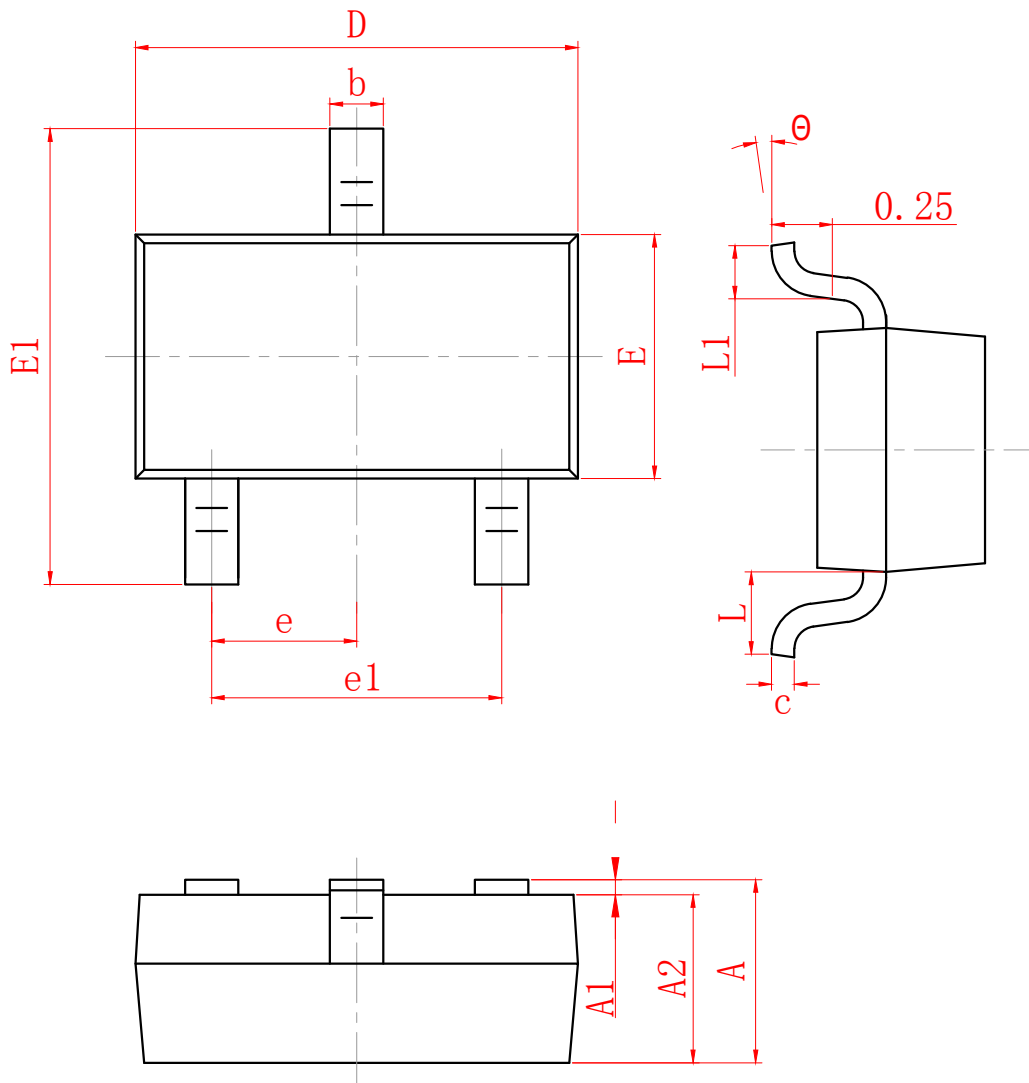


#### SOT-23 Reel



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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