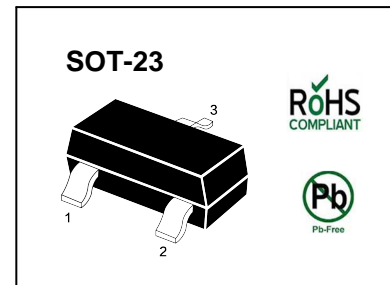
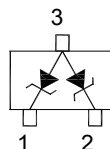


SILICON PLANAR ZENER DIODES

Features

- Zener breakdown voltage range - 2.4 V to 75 V
- Package designed for optimal automated board assembly
- Small package size for high density applications



Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	350	mW
Thermal Resistance, Junction to Ambient ¹⁾	R _{θJA}	417	°C/W
Junction and Storage Temperature Range	T _J , T _S	- 65 to + 150	°C

¹⁾ Alumina = 0.4 X 0.3 X 0.024 in, 99.5% alumina

Characteristics at T_a = 25 °C

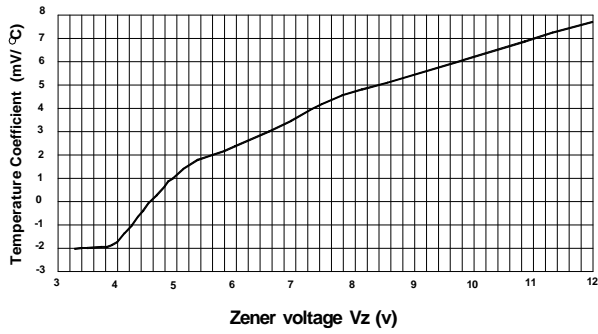
Parameter	Symbol	Max.	Unit
Forward Voltage at I _F = 10 mA	V _F	0.9	V

Electrical Characteristics ($T_a = 25\text{ }^\circ\text{C}$ unless otherwise noted)

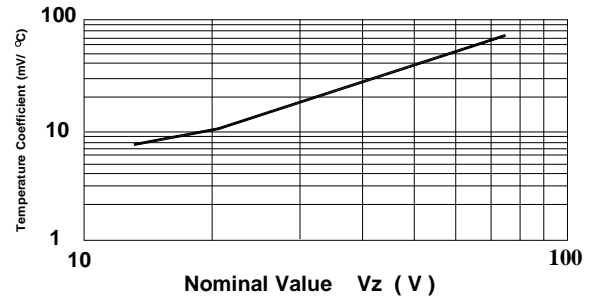
Type	Marking Code	Zener Voltage Range ¹⁾				Dynamic Resistance		Reverse Leakage Current	
		V_Z			at I_{ZT}	Z_{ZT}	at I_{ZT}	I_R	at V_R
		Nom. (V)	Min. (V)	Max. (V)	mA	Max. (Ω)	mA	Max. (μA)	V
BZX84C2V4CA	7H	2.4	2.2	2.6	5	100	5	50	1
BZX84C2V7CA	7J	2.7	2.5	2.9	5	100	5	20	1
BZX84C3V0CA	MR	3.0	2.8	3.2	5	95	5	10	1
BZX84C3V3CA	MX	3.3	3.1	3.5	5	95	5	5	1
BZX84C3V6CA	MY	3.6	3.4	3.8	5	90	5	5	1
BZX84C3V9CA	MZ	3.9	3.7	4.1	5	90	5	3	1
BZX84C4V3CA	NA	4.3	4	4.6	5	90	5	3	1
BZX84C4V7CA	NB	4.7	4.4	5	5	80	5	3	2
BZX84C5V1CA	NC	5.1	4.8	5.4	5	60	5	2	2
BZX84C5V6CA	ND	5.6	5.2	6	5	40	5	1	2
BZX84C6V2CA	NE	6.2	5.8	6.6	5	10	5	3	4
BZX84C6V8CA	NF	6.8	6.4	7.2	5	15	5	2	4
BZX84C7V5CA	NH	7.5	7	7.9	5	15	5	1	5
BZX84C8V2CA	NJ	8.2	7.7	8.7	5	15	5	0.7	5
BZX84C9V1CA	NK	9.1	8.5	9.6	5	15	5	0.5	6
BZX84C10CA	NM	10	9.4	10.6	5	20	5	0.2	7
BZX84C11CA	NN	11	10.4	11.6	5	20	5	0.1	8
BZX84C12CA	NP	12	11.4	12.7	5	25	5	0.1	8
BZX84C13CA	NX	13	12.4	14.1	5	30	5	0.1	8
BZX84C15CA	NY	15	14.3	15.8	5	30	5	0.05	10.5
BZX84C16CA	NZ	16	15.3	17.1	5	40	5	0.05	11.2
BZX84C18CA	PA	18	16.8	19.1	5	45	5	0.05	12.6
BZX84C20CA	PB	20	18.8	21.2	5	55	5	0.05	14
BZX84C22CA	PC	22	20.8	23.3	5	55	5	0.05	15.4
BZX84C24CA	PD	24	22.8	25.6	5	70	5	0.05	16.8
BZX84C27CA	PE	27	25.1	28.9	2	80	2	0.05	18.9
BZX84C30CA	PF	30	28	32	2	80	2	0.05	21
BZX84C33CA	PH	33	31	35	2	80	2	0.05	23.1
BZX84C36CA	PJ	36	34	38	2	90	2	0.05	25.2
BZX84C39CA	PM	39	37	41	2	130	2	0.05	27.3
BZX84C43CA	PN	43	40	46	2	150	2	0.05	30.1
BZX84C47CA	PP	47	44	50	2	170	2	0.05	32.9
BZX84C51CA	7K	51	48	54	2	180	2	0.05	35.7
BZX84C56CA	7M	56	52	60	2	200	2	0.05	39.2
BZX84C62CA	7N	62	58	66	2	215	2	0.05	43.4
BZX84C68CA	7P	68	64	72	2	240	2	0.05	47.6
BZX84C75CA	7R	75	70	79	2	255	2	0.05	52.5

¹⁾ Tested with pulses $t_p = 20\text{ ms}$.

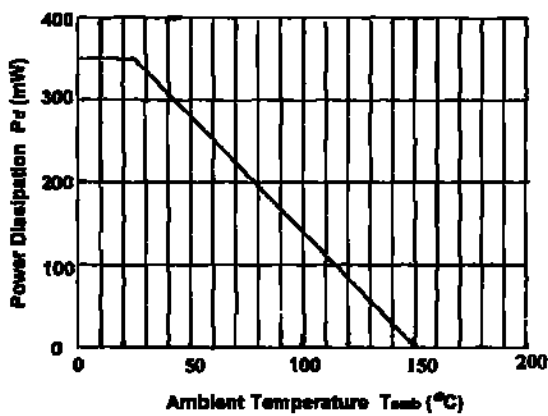
Temperature Coefficient



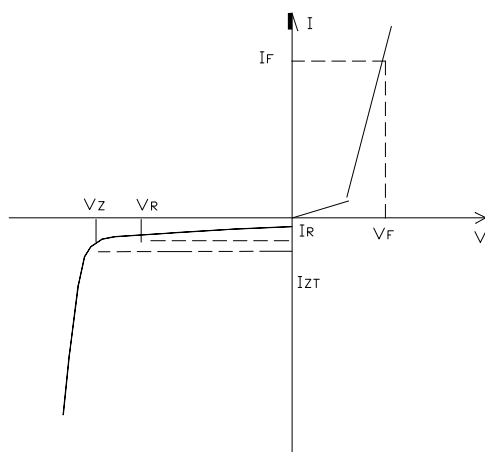
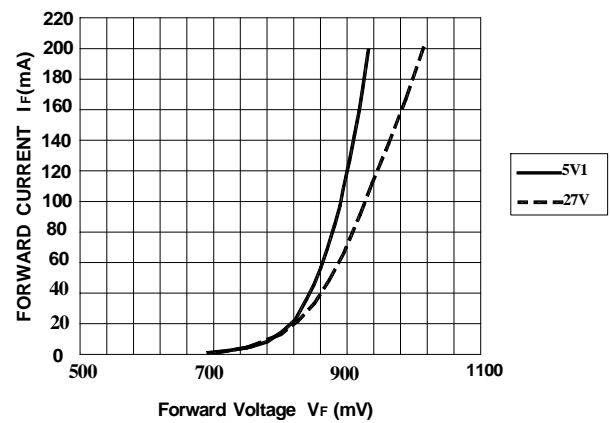
Temperature Coefficient



Power Derating Curve



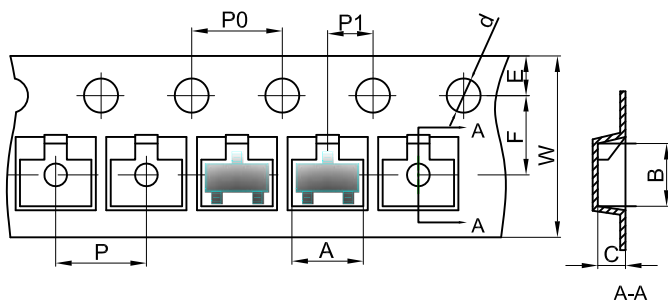
Typical Forward Voltage



Zener Voltage Regulator

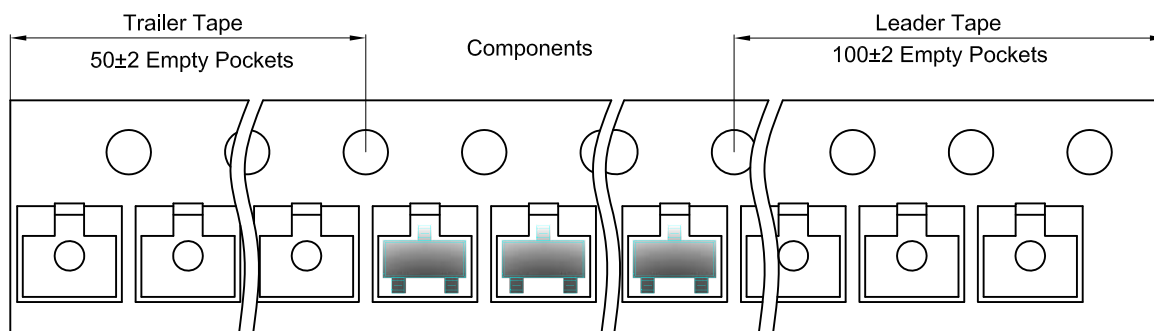
SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape

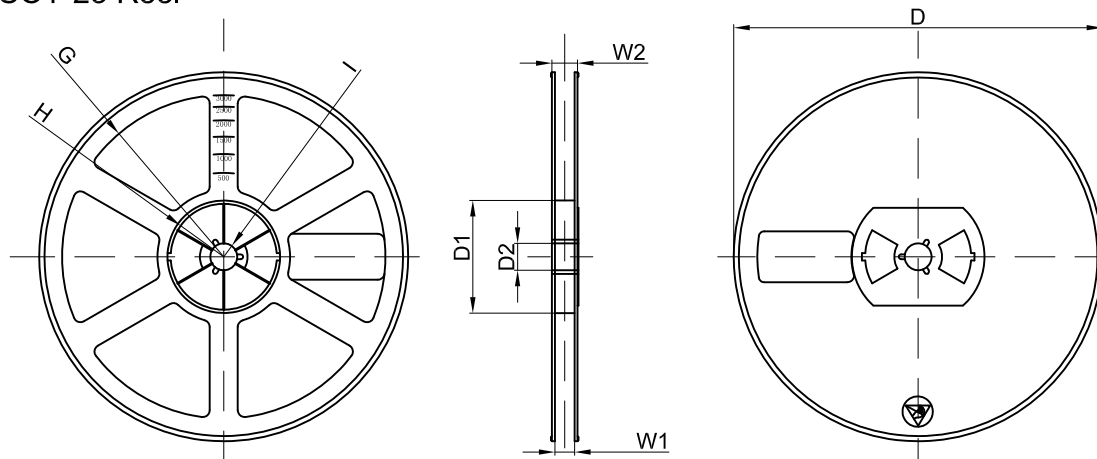


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer

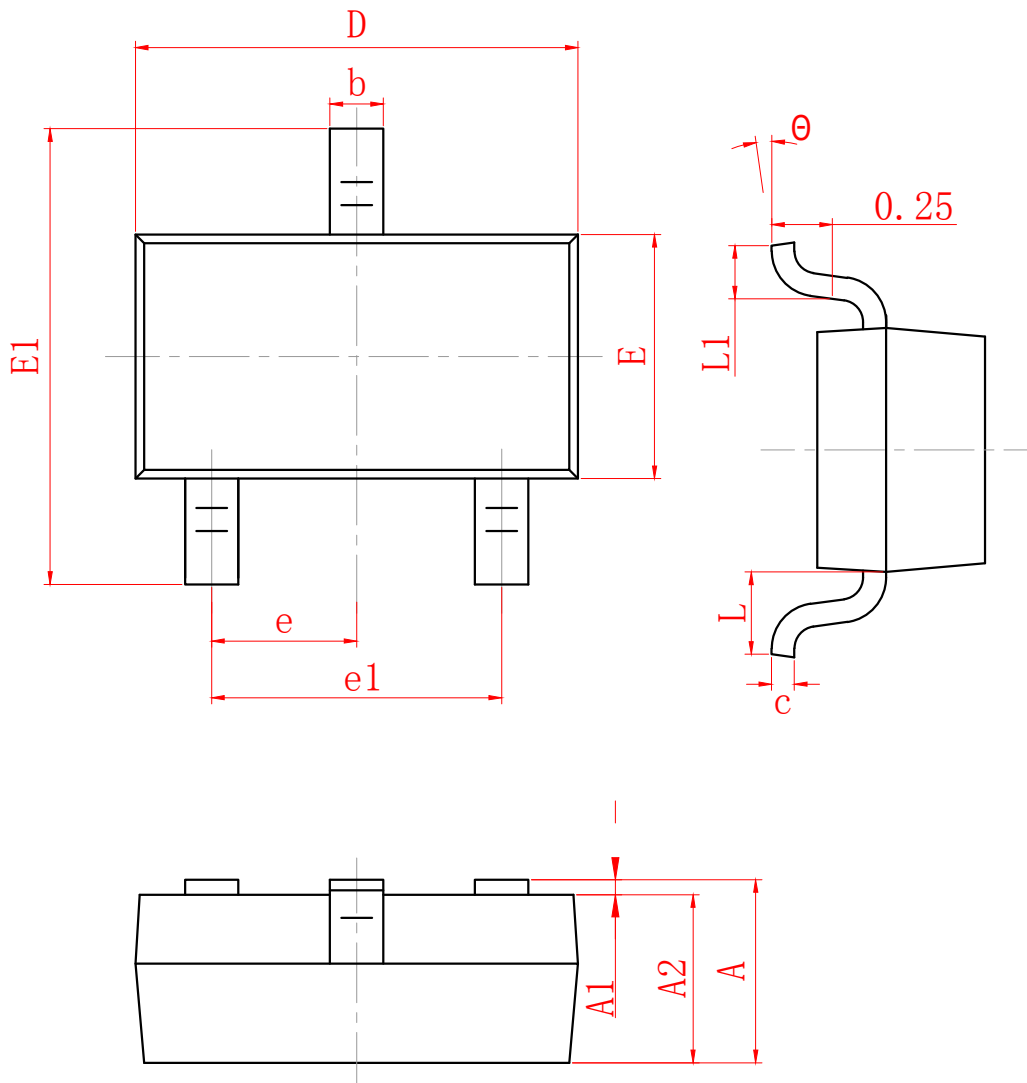


SOT-23 Reel



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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