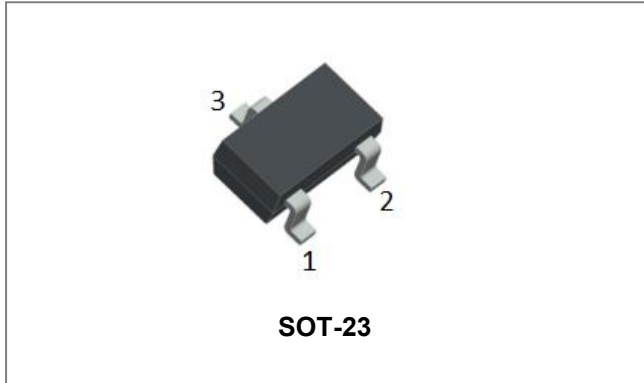


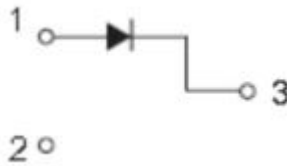
BZX84C2V4-BZX84C51 ZENER DIODE



Features

- Planar Die Construction
- 350mW Power Dissipation
- 2.4V- 51V Nominal Zener Voltage
- 5% Standard Vz Tolerance
- Designed for Surface Mount Application
- Plastic Material — UL Recognition Flammability Classification 94V-O
- “-A” is an AEC-Q101 qualified device
- This is a Halogen Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration



Mechanical Characteristics

- Case: SOT-23, Molded Plastic
- Terminals: Plated leads Solderable per MIL-STD-750, Method 2026
- Mounting Position: Any
- Weight: 0.008g

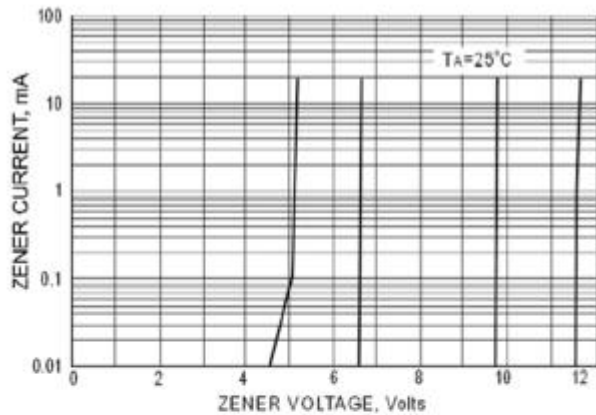
Maximum Ratings@ $T_A=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Value	Units
Power Dissipation	P_D	350	mW
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	$^\circ\text{C}$

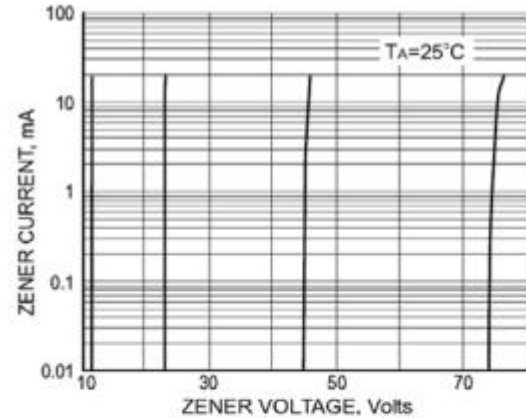
Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Part Number	Marking	Nominal Zener Voltage			Max. Zener Impedance				Max.Reverse Leakage Current	
		$V_Z(V) @ I_{ZT}^{-1}$			$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		IR @ VR	
		Nom.	Min.	Max.	Ohm	mA	Ohm	mA	μA	V
BZX84C2V4	W1/Z11	2.4	2.28	2.52	100	5	600	1	50	1.0
BZX84C2V7	W2/Z12	2.7	2.5	2.9	100	5	600	1	20	1.0
BZX84C3V0	W3/Z13	3	2.8	3.2	95	5	600	1	10	1.0
BZX84C3V3	W4/Z14	3.3	3.1	3.5	95	5	600	1	5	1.0
BZX84C3V6	W5/Z15	3.6	3.4	3.8	90	5	600	1	5	1.0
BZX84C3V9	W6/Z16	3.9	3.7	4.1	90	5	600	1	3	1.0
BZX84C4V3	W7/Z17	4.3	4	4.6	90	5	600	1	3	1.0
BZX84C4V7	W8/Z1	4.7	4.4	5	80	5	500	1	3	2.0
BZX84C5V1	W9/Z2	5.1	4.8	5.4	60	5	480	1	2	2.0
BZX84C5V6	WA/Z3	5.6	5.2	6	40	5	400	1	1	2.0
BZX84C6V2	WB/Z4	6.2	5.8	6.6	10	5	150	1	3	4.0
BZX84C6V8	WC/Z5	6.8	6.4	7.2	15	5	80	1	2	4.0
BZX84C7V5	WD/Z6	7.5	7	7.9	15	5	80	1	1	5.0
BZX84C8V2	WE/Z7	8.2	7.7	8.7	15	5	80	1	0.7	5.0
BZX84C9V1	WF/Z8	9.1	8.5	9.6	15	5	100	1	0.5	6.0
BZX84C10	WG/Z9	10	9.4	10.6	20	5	150	1	0.2	7.0
BZX84C11	WH/Y1	11	10.4	11.6	20	5	150	1	0.1	8.0
BZX84C12	WI/Y2	12	11.4	12.7	25	5	150	1	0.1	8.0
BZX84C13	WK/Y3	13	12.4	14.1	30	5	170	1	0.1	8.0
BZX84C15	WL/Y4	15	13.8	15.6	30	5	200	1	0.1	10.5
BZX84C16	WM /Y5	16	15.3	17.1	40	5	200	1	0.1	11.2
BZX84C18	WN/Y6	18	16.8	19.1	45	5	225	1	0.1	12.6
BZX84C20	WO/Y7	20	18.8	21.2	55	5	225	1	0.1	14.0
BZX84C22	WP/Y8	22	20.8	23.3	55	5	250	1	0.1	15.4
BZX84C24	WR/Y9	24	22.8	25.6	70	5	250	1	0.1	16.8
BZX84C27	WS/Y10	27	25.1	28.9	80	2	300	1	0.1	18.9
BZX84C30	WT /Y11	30	28	32	80	2	300	1	0.1	21.0
BZX84C33	WU/Y12	33	31	35	80	2	325	1	0.1	23.1
BZX84C36	WW/Y13	36	34	38	90	2	350	1	0.1	25.2
BZX84C39	WX/Y14	39	37	41	130	2	350	1	0.1	27.3
BZX84C43	WY/Y15	43	40.85	45.15	150	5	375	1	0.1	30.10
BZX84C47	WZ/Y16	47	44.65	49.35	170	5	375	1	0.1	32.90
BZX84C51	XA/Y17	51	48.45	53.55	100	5	400	1	0.1	35.70

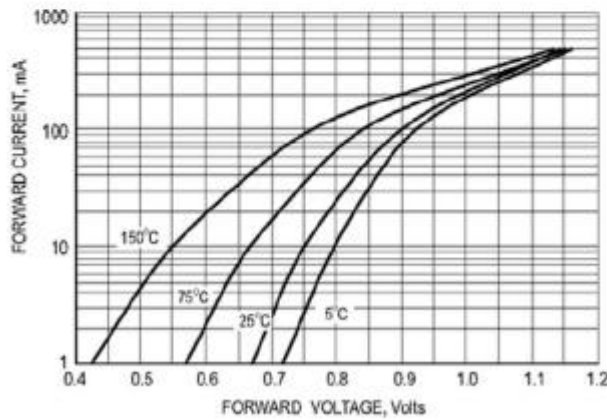
Ratings and Characteristics Curves



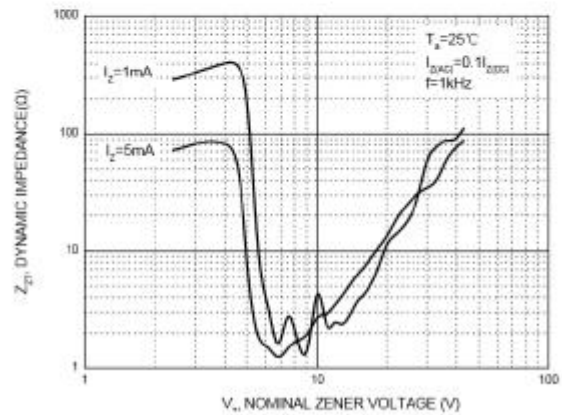
ZENER BREAKDOWN CHARACTERISTIC



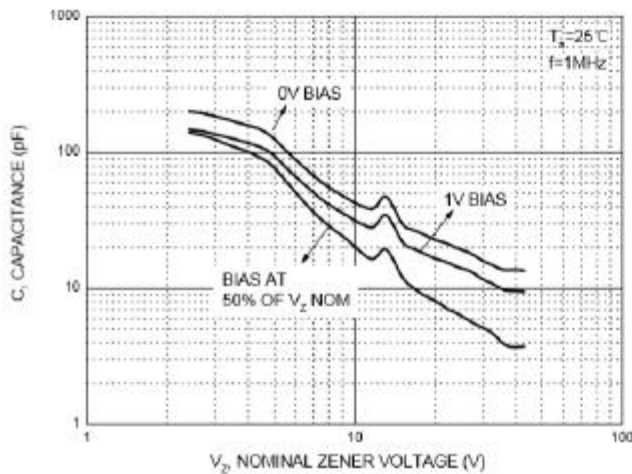
ZENER BREAKDOWN CHARACTERISTICS



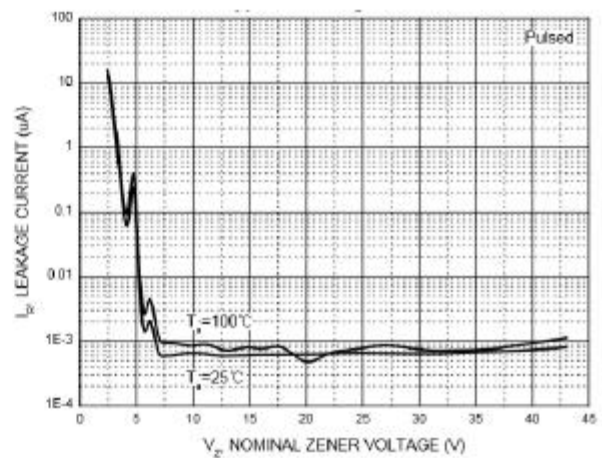
TYPICAL FORWARD VOLTAGE



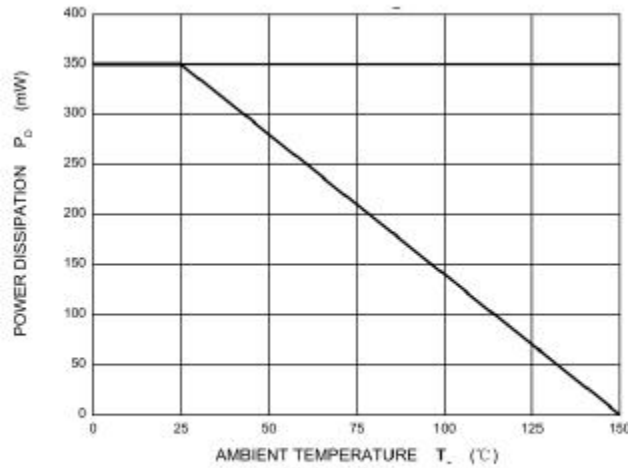
Effect of Zener Voltage on Zener Impedance



Typical Capacitance



Typical Leakage Current



POWER DISSIPATION VS. AMBIENT TEMP

Ordering Information

Device	Package	Shipping
BZX84C2V4- BZX84C51	SOT-23	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

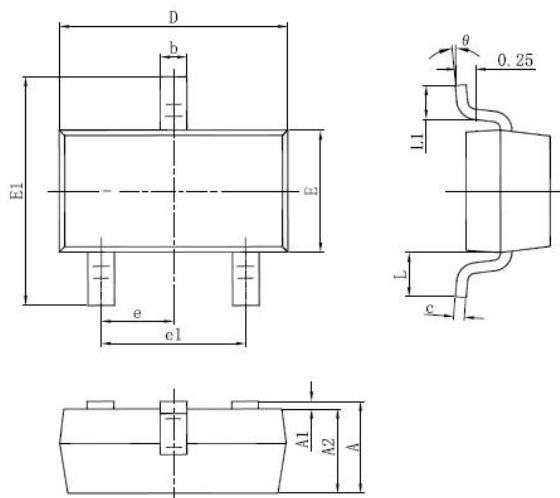
Marking Diagram



Z11 = Marking Code

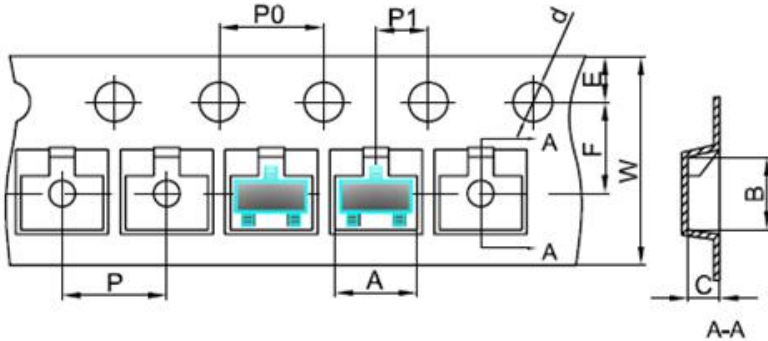
Note: If date code is before 2016 year, please contact with factory about marking.

Mechanical Dimensions SOT-23



SYMBOL	Millimeters		Inches	
	MIN.	MAX.	MIN.	MAX.
A	0.890	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.076	0.170	0.003	0.007
D	2.650	3.050	0.104	0.120
E	1.190	1.400	0.047	0.055
E1	2.100	2.550	0.083	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.780	2.050	0.070	0.081
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Carrier Tape Specification SOT-23



SYMBOL	Millimeters	
	Min.	Max.
A	3.05	3.25
B	2.67	2.87
C	1.12	1.32
d	1.40	1.60
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

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