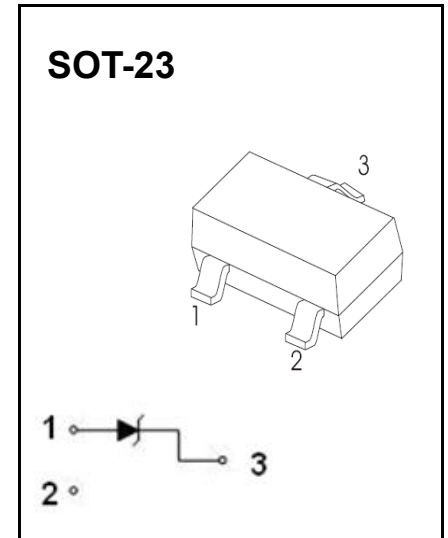


## ■ Features

- Low Zener Impedance
- Power Dissipation of 300mW
- High Stability and High Reliability

## ■ Mechanical Data

- package:SOT-23
- Flammability rating of epoxy resin: UL 94V-0
- Mounting Position: Any.



## ■ ORDERING INFORMATION

- Part Number: BZX84Cxx
- Package: SOT-23
- Quantity per reel: 3,000 pcs
- Packing: Tape & Reel
- Reel Size: 7 inches

## ■ Maximum Ratings & Thermal Characteristics(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Power Dissipation.(Note 1)	Pd	300	mW
Forward Voltage @IF=10mA.(Note 2)	Vf	0.9	V
Storage temperature range	Ts	-65-+150	°C
Thermal resistance junction to ambient air Warmewider stand Sperschicht –umgebende Luft	RthA	417	K/W

- 1) Valid provided that device terminals are kept at ambient temperature.
- 2) Test with pulse, period=5ms, pulse width=300us.
- 3) 3) f=1KHz

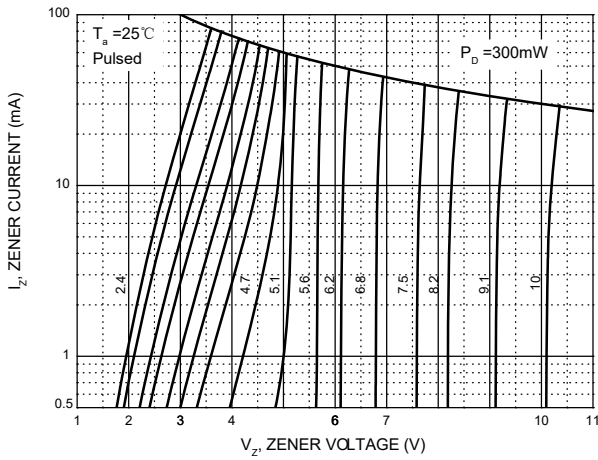
**Electrical Characteristics**(Ratings at 25 °C ambient temperature unless otherwise specified)

Device	Marking	Zener Voltage Range V <sub>z</sub>			Maximum Zener Impedance			Reverse Current I <sub>r</sub>		Temperature Coefficient of Zener voltage @I <sub>zt</sub> =5mA mV/°C	
					Z <sub>zt</sub>	Z <sub>zk</sub>					
		Min (V)	Max (V)	I <sub>zt</sub> mA	Max Ω	Max Ω	I <sub>zk</sub> mA	Max μA	VR V		
BZX84C2V4	Z11	2.20	2.60	5	100	600	1.0	50.0	1.0	-3.5	0.0
BZX84C2V7	Z12	2.50	2.90	5	100	600	1.0	20.0	1.0	-3.5	0.0
BZX84C3V0	Z13	2.80	3.20	5	95	600	1.0	10.0	1.0	-3.5	0.0
BZX84C3V3	Z14	3.10	3.50	5	95	600	1.0	5.0	1.0	-3.5	0.0
BZX84C3V6	Z15	3.40	3.80	5	90	600	1.0	5.0	1.0	-3.5	0.0
BZX84C3V9	Z16	3.70	4.10	5	90	600	1.0	3.0	1.0	-3.5	0.0
BZX84C4V3	Z17	4.00	4.60	5	90	600	1.0	3.0	1.0	-3.5	0.0
BZX84C4V7	Z1	4.40	5.00	5	80	500	1.0	3.0	2.0	-3.5	0.2
BZX84C5V1	Z2	4.80	5.40	5	60	480	1.0	2.0	2.0	-2.7	1.2
BZX84C5V6	Z3	5.20	6.00	5	40	400	1.0	1.0	2.0	-2.0	2.5
BZX84C6V2	Z4	5.80	6.60	5	10	150	1.0	3.0	4.0	0.4	3.7
BZX84C6V8	Z5	6.40	7.20	5	15	80	1.0	2.0	4.0	1.2	4.5
BZX84C7V5	Z6	7.00	7.90	5	15	80	1.0	1.0	5.0	2.5	5.3
BZX84C8V2	Z7	7.70	8.70	5	15	80	1.0	0.7	5.0	3.2	6.2
BZX84C9V1	Z8	8.50	9.60	5	15	100	1.0	0.5	6.0	3.8	7.0
BZX84C10	Z9	9.40	10.60	5	20	150	1.0	0.2	7.0	4.5	8.0
BZX84C11	Y1•	10.40	11.60	5	20	150	1.0	0.1	8.0	5.4	9.0
BZX84C12	Y2•	11.40	12.70	5	25	150	1.0	0.1	8.0	6.0	10.0
BZX84C13	Y3	12.40	14.10	5	30	170	1.0	0.1	8.0	7.0	11.0
BZX84C15	Y4	13.80	15.60	5	30	200	1.0	0.1	10.5	9.2	13.0
BZX84C16	Y5	15.30	17.10	5	40	200	1.0	0.1	11.2	10.4	14.0
BZX84C18	Y6•	16.80	19.10	5	45	225	1.0	0.1	12.6	12.4	16.0
BZX84C20	Y7	18.80	21.20	5	55	225	1.0	0.1	14.0	14.4	18.0
BZX84C22	Y8	20.80	23.30	5	55	250	1.0	0.1	15.4	16.4	20.0
BZX84C24	Y9	22.80	25.60	5	70	250	1.0	0.1	16.8	18.4	22.0
BZX84C27	Y10	25.10	28.90	2	80	300	0.5	0.1	18.9	21.4	25.3
BZX84C30	Y11•	28.00	32.00	2	80	300	0.5	0.1	21.0	24.4	29.4
BZX84C33	Y12	31.00	35.00	2	80	325	0.5	0.1	23.1	27.1	33.4
BZX84C36	Y13	34.00	38.00	2	90	350	0.5	0.1	25.2	30.4	37.4
BZX84C39	Y14	37.00	41.00	2	130	350	0.5	0.1	27.3	33.4	41.2
BZX84C43	Y15	40.00	46.00	2	100	700	1.0	0.1	32.0	10.0	12.0
BZX84C47	Y16	44.00	50.00	2	100	750	1.0	0.1	35.0	10.0	12.0
BZX84C51	Y17	48.00	54.00	2	125	750	1.0	0.1	38.0	10.0	12.0
BZX84C56	Y18	52.00	60.00	2	135	700	1.0	0.1	39.0	10.0	12.0
BZX84C62	Y19	58.00	66.00	2	200	1000	1.0	0.2	47.0	10.0	12.0
BZX84C68	Y20	64.00	72.00	2	250	1000	1.0	0.2	52.0	10.0	12.0
BZX84C75	Y21•	70.00	79.00	2	300	1000	1.0	0.2	57.0	10.0	12.0

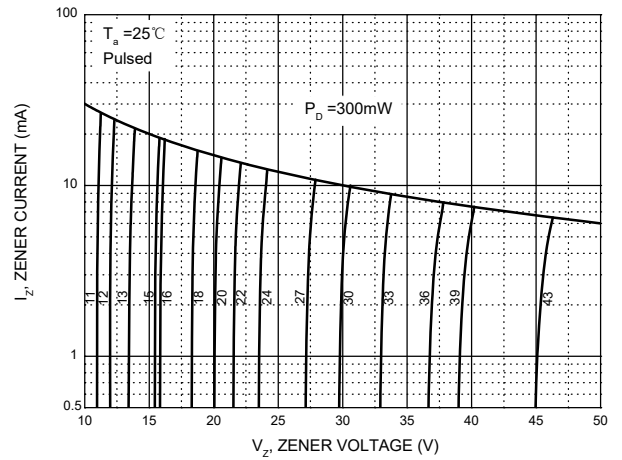


■ Typical Characteristics

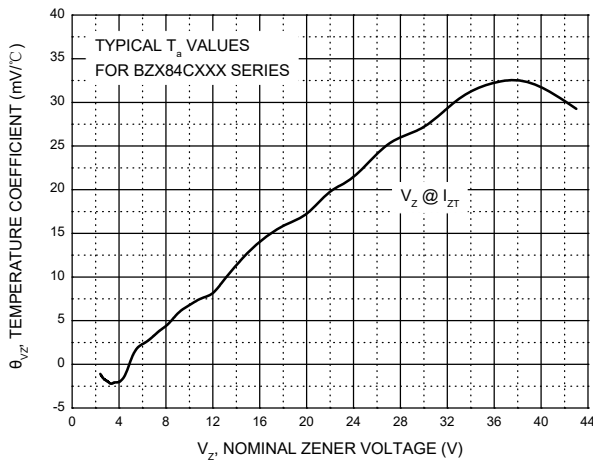
Zener Characteristics ( $V_z$  Up to 10 V)



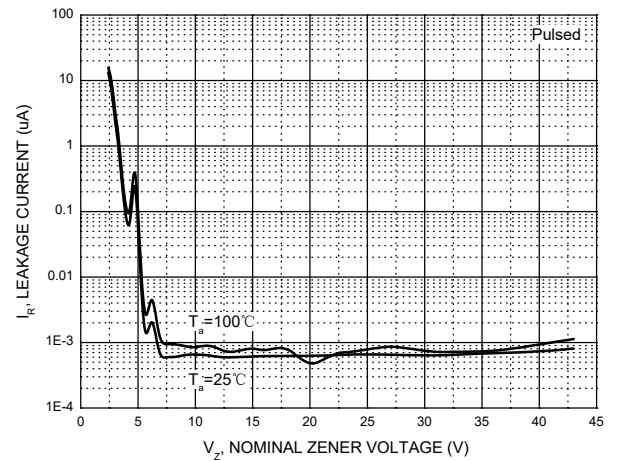
Zener Characteristics (11 V to 43 V)



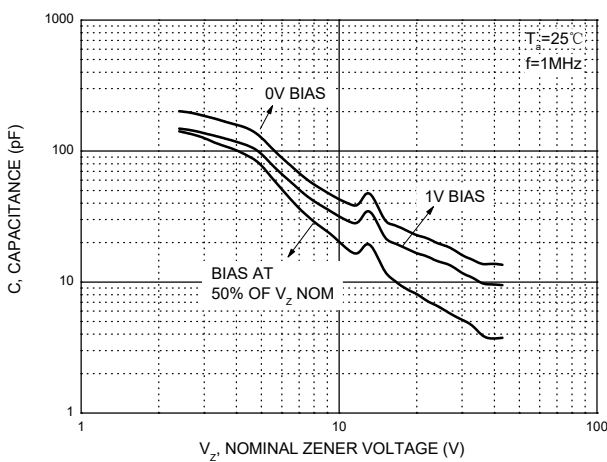
Temperature Coefficients



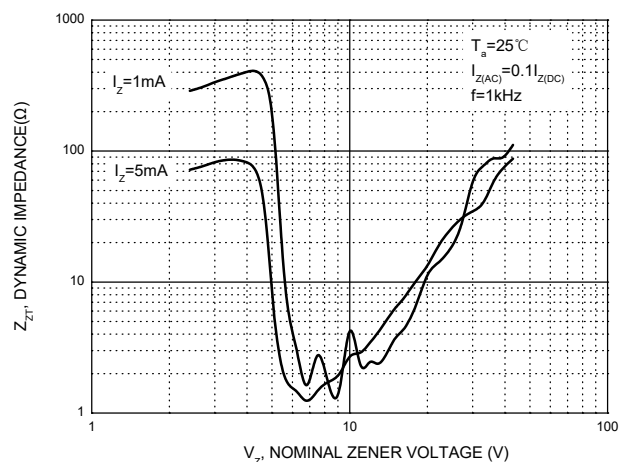
Typical Leakage Current



Typical Capacitance

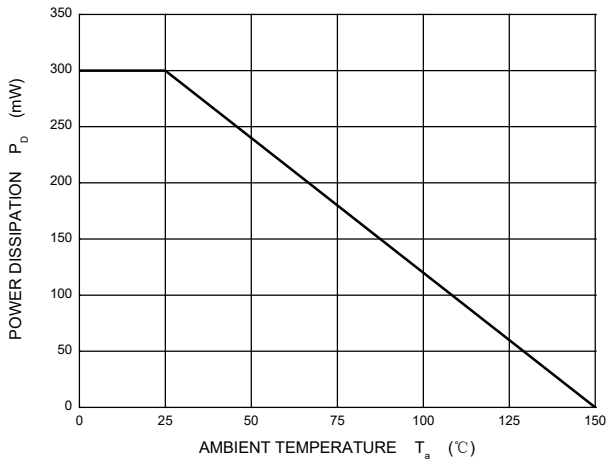


Effect of Zener Voltage on Zener Impedance

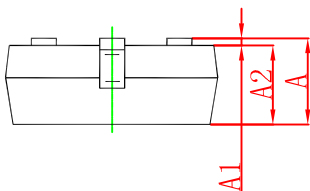
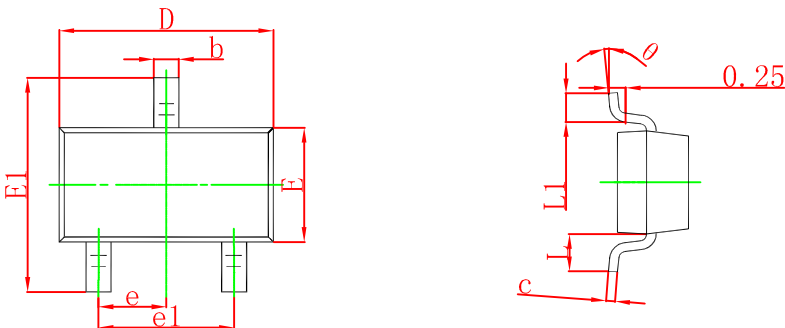




Power Derating Curve



■ SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	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	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
$\theta$	0°	8°	0°	8°