

**/ Descriptions**

SOT-23  
Zener Diode in a SOT-23 Plastic Package.

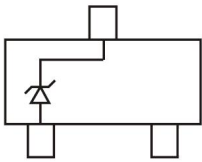
**/ Features**

300mW  
300mW power dissipation, Ideally Suited for Automated Assembly, HF Product.

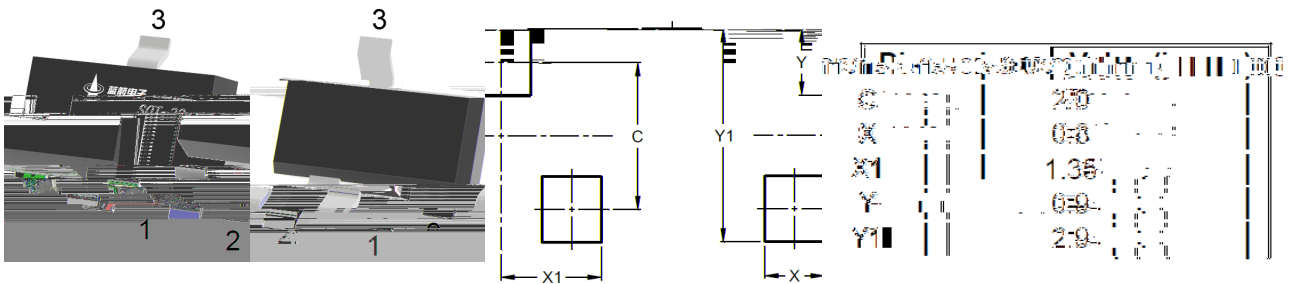
**/ Applications**

2.4V-39V  
2.4V to 39V wide zener voltage range applications.

**/ Equivalent Circuit**



**/ Pinning**



PIN: See Equivalent Circuit.

**/ Marking**

See Electrical Characteristics.

**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit
Forward Voltage( I <sub>F</sub> =10mA)	V <sub>F</sub>	0.9	V
Power Dissipation(Note 1)	P <sub>D</sub>	300	mW
Power Dissipation(Note 4)	P <sub>D</sub>	350	mW
Thermal Resistance, Junction to Ambient(Note 1)	R <sub>JA</sub>	417	/W
Thermal Resistance, Junction to Ambient(Note 4)	R <sub>JA</sub>	357	/W
Junction and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-65 150	

**/ Electrical Characteristics(Ta=25 )**

Type Number	Marking Code	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current	
		V <sub>Z</sub> @I <sub>ZT</sub>			I <sub>ZT</sub>	Z <sub>KT</sub> @I <sub>ZT</sub>	Z <sub>ZK</sub> @I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub>	@V <sub>R</sub>
		Nom (V)	Min (V)	Max (V)	mA			mA	μA	V
BZX84B2V4	HBV	2.4	2.35	2.45	5	94	564	1	45	1
BZX84B2V7	CVH	2.7	2.65	2.75	5	94	564	1	18	1
BZX84B3V0	DVH	3.0	2.94	3.06	5	89	564	1	9	1
BZX84B3V3	HEV	3.3	3.23	3.37	5	89	564	1	4.5	1
BZX84B3V6	HFV	3.6	3.53	3.67	5	84	564	1	4.5	1
BZX84B3V9	HGV	3.9	3.82	3.96	5	84	564	1	2.7	1
BZX84B4V3	HHV	4.3	4.21	4.39	5	84	564	1	2.7	1
BZX84B4V7	H1V	4.7	4.61	4.79	5	75	564	1	2.7	2
BZX84B5V1	H2V	5.1	5.00	5.20	5	56	470	1	1.8	2
BZX84B5V6	H3V	5.6	5.49	5.71	5	27	451	1	0.9	2
BZX84B6V2	H4V	6.2	6.08	6.32	5	9	376	1	2.7	4
BZX84B6V8	H5V	6.8	6.66	6.94	5	14	141	1	1.8	4
BZX84B7V5	H6V	7.5	7.35	7.65	5	14	75	1	0.9	5
BZX84B8V2	H7V	8.2	8.04	8.36	5	14	75	1	0.63	5
BZX84B9V1	H8V	9.1	8.92	9.28	5	14	94	1	0.45	6
BZX84B10	H9V	10	9.80	10.20	5	18	141	1	0.18	7
BZX84B11	H1U	11	10.78	11.22	5	18	141	1	0.09	8

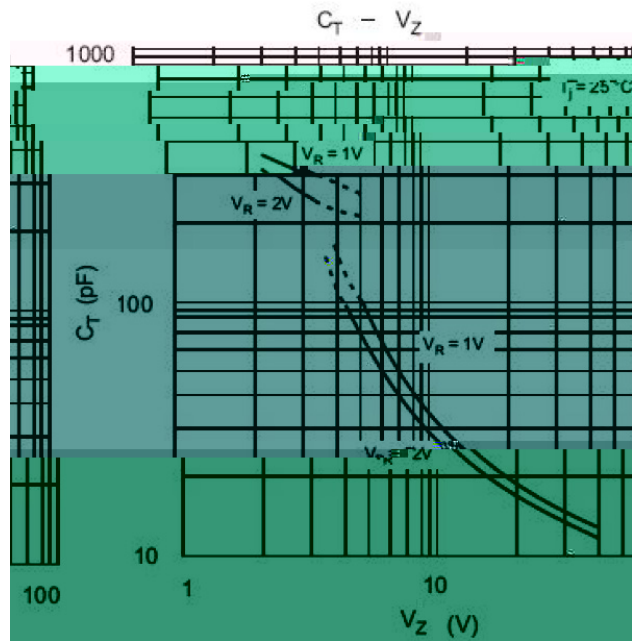
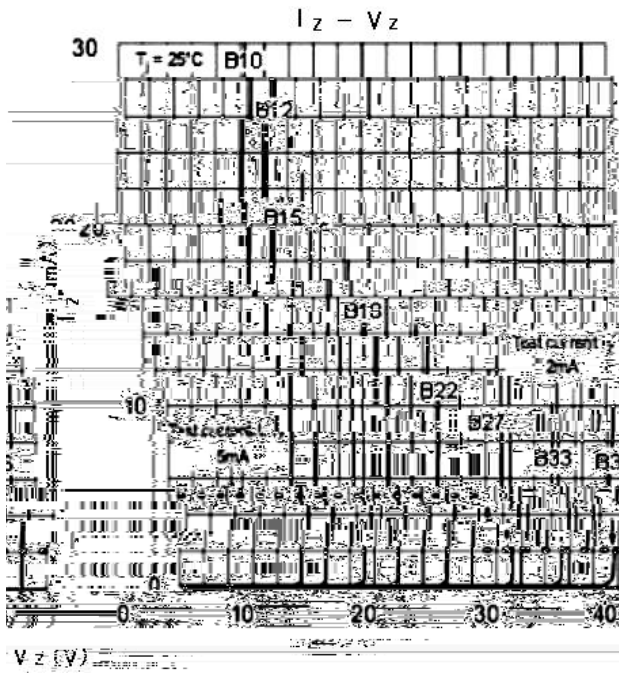
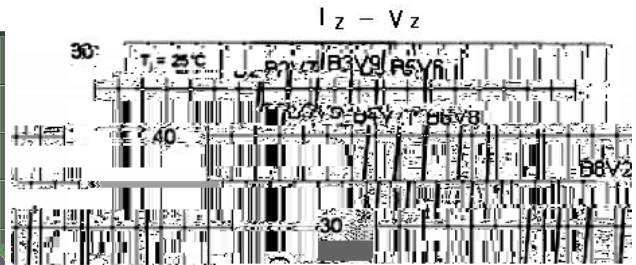
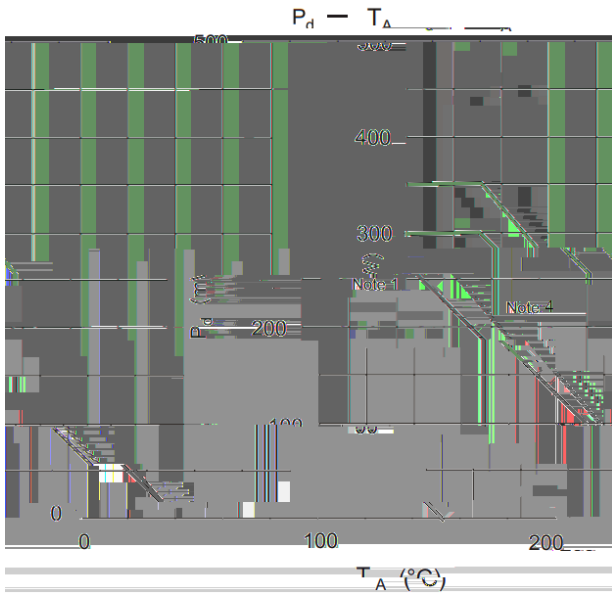
**/ Electrical Characteristics(Ta=25 )**

Type Number	Marking Code	Zener Voltage Range (Note 2)		Maximum Zener Impedance (Note 3)			Maximum Reverse Current	
		$V_z @ I_{ZT}$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R @ V_R$	

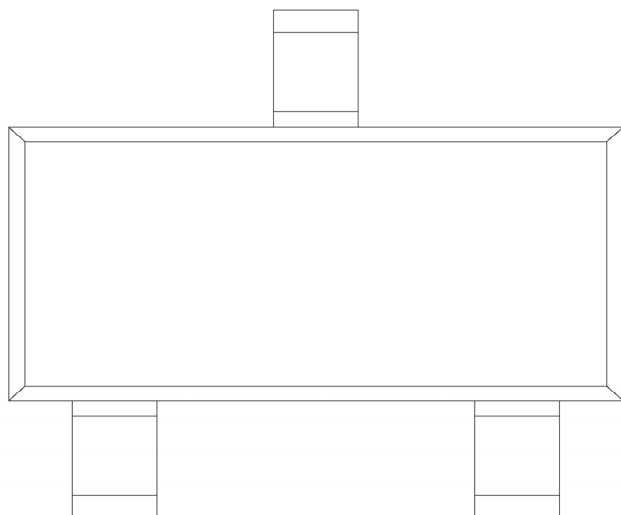
Notes:

1. Device mounted on FR-4 PC board with recommended pad layout.
2. Short duration test pulse used to minimize self-heating effect.
3.  $f = 1\text{KHz}$ .
4. Valid provided the terminals are kept at ambient temperature.

/ Electrical Characteristic Curve







**BZX84BXXX**  
Rev.A Jan.-2023

**DATA SHEET**