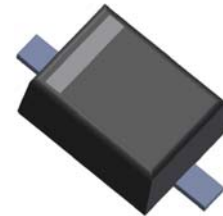


## 200mW SOD-323 SURFACE MOUNT Small Outline Flat Lead Plastic Package Zener Voltage Regulators

Green Product



SOD-323 Flat Lead

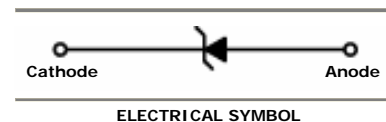
### Absolute Maximum Ratings T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	200	mW
T <sub>STG</sub>	Storage Temperature Range	-65 to +150	°C
T <sub>OPR</sub>	Operating Temperature Range	-65 to +150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

### Specification Features:

- Wide Zener Voltage Range Selection, 2.4V to 75V
- VZ Tolerance Selection of ±5% (C Series)
- Flat Lead SOD-323 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode



### Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise noted

Device Type	Device Marking	V <sub>Z</sub> @ I <sub>ZT</sub> (Volts)			I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> @ I <sub>ZT</sub> (Ω) Max	I <sub>ZK</sub> (mA)	Z <sub>ZK</sub> @ I <sub>ZK</sub> (Ω) Max	I <sub>R</sub> @ V <sub>R</sub> (μA) Max	V <sub>R</sub> (Volts)
		Min	Nom	Max						
BZT52C2V4S	Z0	2.28	2.4	2.52	5	100	1	564	45	1
BZT52C2V7S	Z1	2.57	2.7	2.84	5	100	1	564	18	1
BZT52C3V0S	Z2	2.85	3.0	3.15	5	100	1	564	9	1
BZT52C3V3S	Z3	3.14	3.3	3.47	5	95	1	564	4.5	1
BZT52C3V6S	Z4	3.42	3.6	3.78	5	90	1	564	4.5	1
BZT52C3V9S	Z5	3.71	3.9	4.10	5	90	1	564	2.7	1
BZT52C4V3S	Z6	4.09	4.3	4.52	5	90	1	564	2.7	1
BZT52C4V7S	Z7	4.47	4.7	4.94	5	80	1	470	2.7	2
BZT52C5V1S	Z8	4.85	5.1	5.36	5	60	1	451	1.8	2
BZT52C5V6S	Z9	5.32	5.6	5.88	5	40	1	376	0.9	2
BZT52C6V2S	ZA	5.89	6.2	6.51	5	10	1	141	2.7	4
BZT52C6V8S	ZB	6.46	6.8	7.14	5	15	1	75	1.8	4
BZT52C7V5S	ZC	7.11	7.5	7.86	5	15	1	75	0.9	5
BZT52C8V2S	ZD	7.79	8.2	8.61	5	15	1	75	0.63	5
BZT52C9V1S	ZE	8.65	9.1	9.56	5	15	1	94	0.45	6
BZT52C10S	ZF	9.50	10	10.50	5	20	1	141	0.18	7
BZT52C11S	ZG	10.45	11	11.55	5	20	1	141	0.09	8
BZT52C12S	ZH	11.40	12	12.60	5	25	1	141	0.09	8
BZT52C13S	ZJ	12.35	13	13.65	5	30	1	160	0.09	8
BZT52C15S	ZK	14.25	15	15.75	5	30	1	188	0.045	10.5

### Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise noted

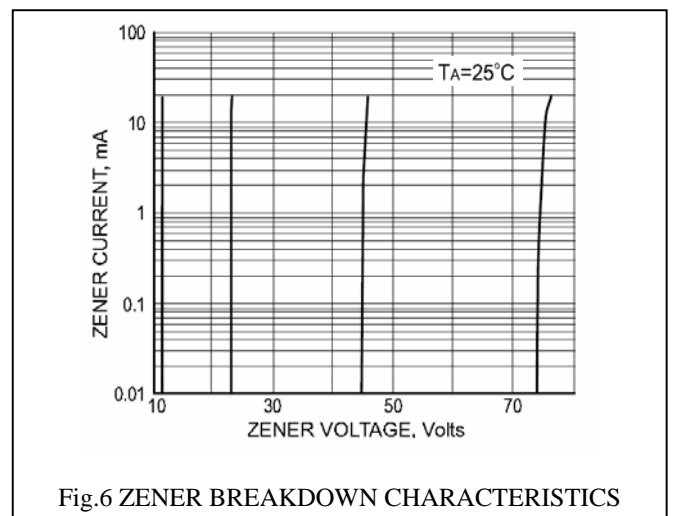
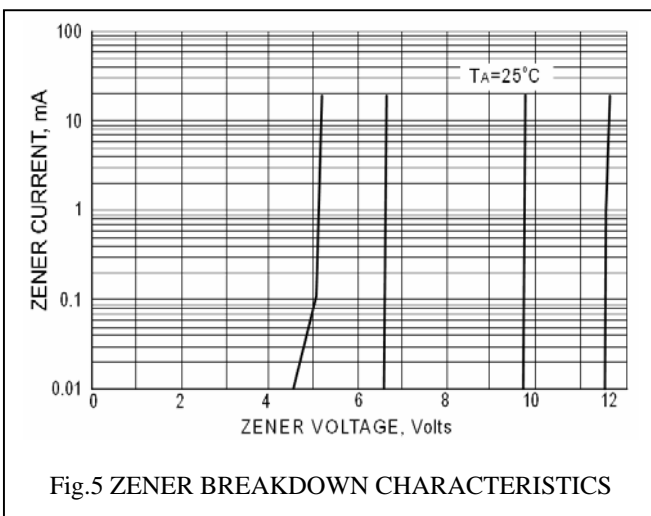
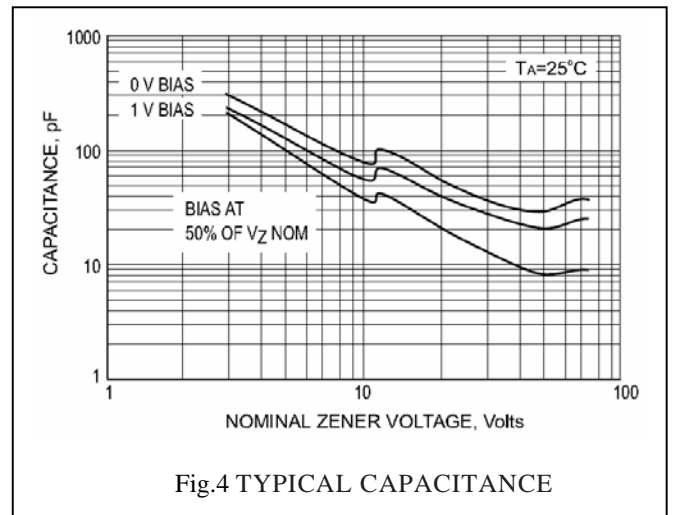
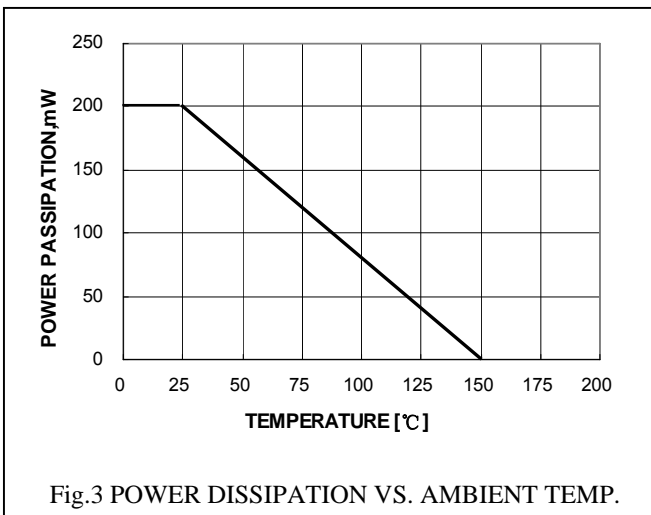
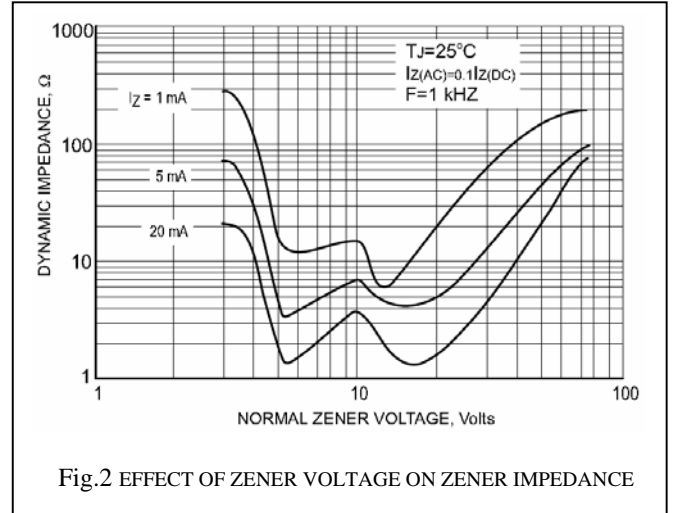
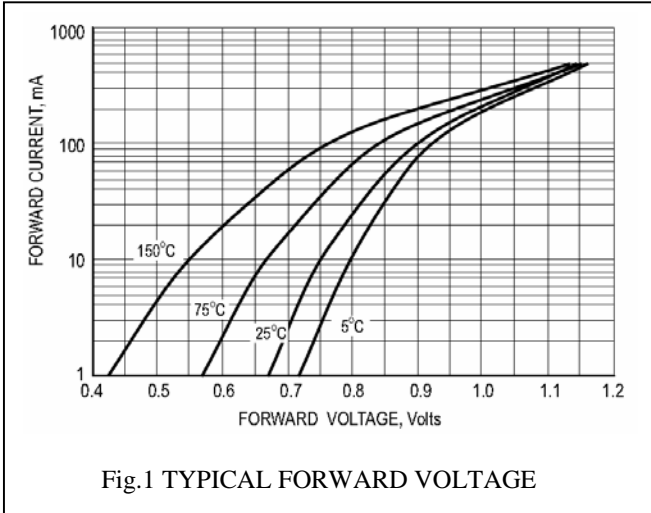
Device Type	Device Marking	V <sub>Z</sub> @ I <sub>ZT</sub> (Volts)			I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> @ I <sub>ZT</sub> (Ω) Max	I <sub>ZK</sub> (mA)	Z <sub>ZK</sub> @ I <sub>ZK</sub> (Ω) Max	I <sub>R</sub> @ V <sub>R</sub> (μA) Max	V <sub>R</sub> (Volts)
		Min	Nom	Max						
BZT52C16S	ZL	15.20	16	16.80	5	40	1	188	0.045	11.2
BZT52C18S	ZM	17.10	18	18.90	5	45	1	212	0.045	12.6
BZT52C20S	ZN	19.00	20	21.00	5	55	1	212	0.045	14.0
BZT52C22S	ZP	20.90	22	23.10	5	55	1	235	0.045	15.4
BZT52C24S	ZR	22.80	24	25.20	5	70	1	235	0.045	16.8
BZT52C27S	ZS	25.65	27	28.35	2	80	0.5	282	0.045	18.9
BZT52C30S	ZT	28.50	30	31.50	2	80	0.5	282	0.045	21.0
BZT52C33S	ZU	31.35	33	34.65	2	80	0.5	306	0.045	23.0
BZT52C36S	ZV	34.20	36	37.80	2	90	0.5	329	0.045	25.2
BZT52C39S	ZW	37.05	39	40.95	2	130	0.5	329	0.045	27.3
BZT52C43S	ZX	40.85	43	45.15	2	150	0.5	353	0.045	30.1
BZT52C47S	ZY	44.65	47	49.35	2	170	0.5	353	0.045	33.0
BZT52C51S	Z-	48.45	51	53.55	2	180	0.5	376	0.045	35.7
BZT52C56S	Z=	53.20	56	58.80	2	200	0.5	400	0.045	39.2
BZT52C62S	Z≡	58.90	62	65.10	2	215	0.5	423	0.045	43.4
BZT52C68S	Z>	64.60	68	71.40	2	240	0.5	447	0.045	47.6
BZT52C75S	Z<	71.25	75	78.75	2	255	0.5	470	0.045	52.5

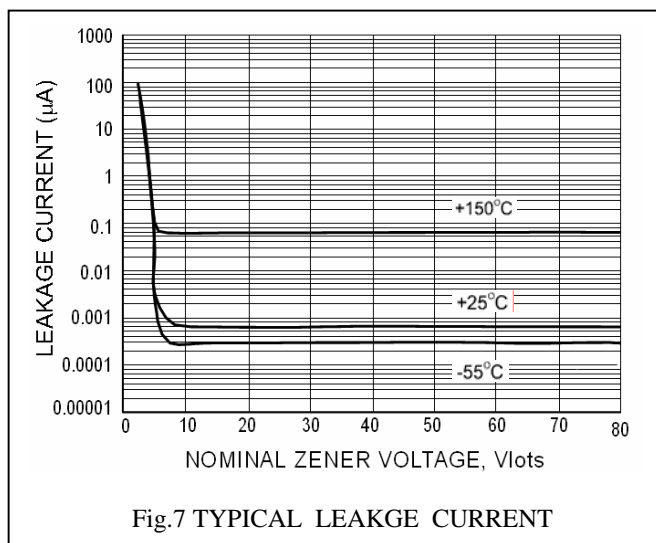
V<sub>F</sub> Forward Voltage = 1 V Maximum @ I<sub>F</sub> = 10 mA for all types

#### Notes:

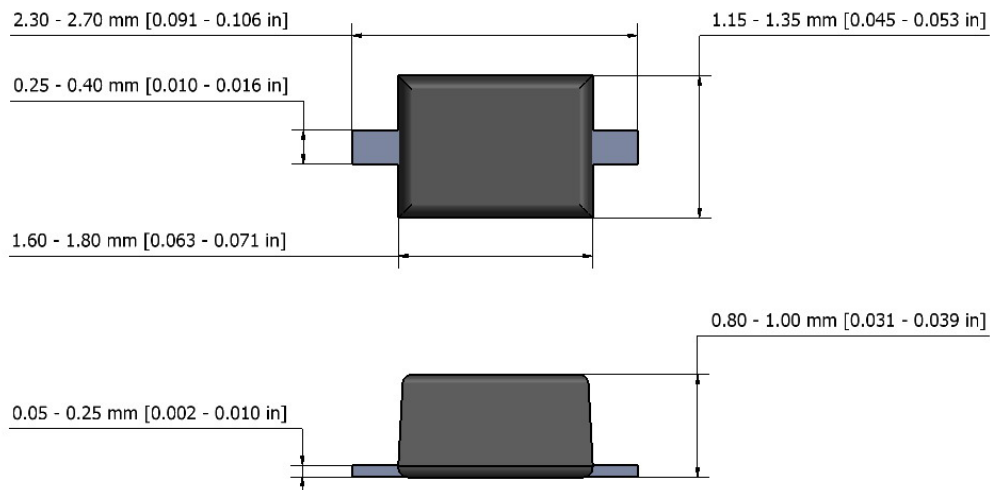
1. The Zener Voltage (V<sub>Z</sub>) is tested under pulse condition of 10mS.
2. The device numbers listed have a standard tolerance on the nominal zener voltage of ±5%.
3. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact us please.
4. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I<sub>ZT</sub> or I<sub>ZK</sub>) is superimposed to I<sub>ZT</sub> or I<sub>ZK</sub>.

### RATING AND CHARACTERISTIC CURVES





### SOD-323 Package Outline



**NOTES:**

1. The above package outline is similar to JEITA SC-90.
2. Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.