

200mW SOD-323 SURFACE MOUNT

Small Outline Flat Lead Plastic Package

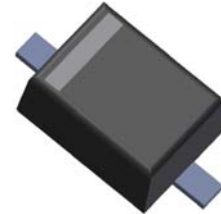
Zener Voltage Regulators

Formosa MS

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-65 to +150	$^\circ\text{C}$
T_{OPR}	Operating Temperature Range	-65 to +150	$^\circ\text{C}$

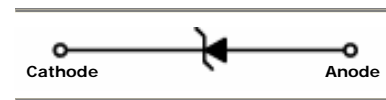
These ratings are limiting values above which the serviceability of the diode may be impaired.



SOD-323 Flat Lead

Specification Features:

- Wide Zener Voltage Range Selection, 2.4V to 75V
- VZ Tolerance Selection of $\pm 5\%$ (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 SYMBOL

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

Device Type	Device Marking	$V_Z @ I_{ZT}$ (Volts)			I_{ZT} (mA)	$Z_{ZT} @ I_{ZT}$ (Ω) Max	I_{ZK} (mA)	$Z_{ZK} @ I_{ZK}$ (Ω) Max	$I_R @ V_R$ (μA) Max	V_R (Volts)
		Min	Nom	Max						
MM3Z2V4CW	Z0	2.28	2.4	2.52	5	100	1	564	45	1
MM3Z2V7CW	Z1	2.57	2.7	2.84	5	100	1	564	18	1
MM3Z3V0CW	Z2	2.85	3.0	3.15	5	100	1	564	9	1
MM3Z3V3CW	Z3	3.14	3.3	3.47	5	95	1	564	4.5	1
MM3Z3V6CW	Z4	3.42	3.6	3.78	5	90	1	564	4.5	1
MM3Z3V9CW	Z5	3.71	3.9	4.10	5	90	1	564	2.7	1
MM3Z4V3CW	Z6	4.09	4.3	4.52	5	90	1	564	2.7	1
MM3Z4V7CW	Z7	4.47	4.7	4.94	5	80	1	470	2.7	2
MM3Z5V1CW	Z8	4.85	5.1	5.36	5	60	1	451	1.8	2
MM3Z5V6CW	Z9	5.32	5.6	5.88	5	40	1	376	0.9	2
MM3Z6V2CW	ZA	5.89	6.2	6.51	5	10	1	141	2.7	4
MM3Z6V8CW	ZB	6.46	6.8	7.14	5	15	1	75	1.8	4
MM3Z7V5CW	ZC	7.11	7.5	7.86	5	15	1	75	0.9	5
MM3Z8V2CW	ZD	7.79	8.2	8.61	5	15	1	75	0.63	5
MM3Z9V1CW	ZE	8.65	9.1	9.56	5	15	1	94	0.45	6
MM3Z10VCW	ZF	9.50	10	10.50	5	20	1	141	0.18	7
MM3Z11VCW	ZG	10.45	11	11.55	5	20	1	141	0.09	8
MM3Z12VCW	ZH	11.40	12	12.60	5	25	1	141	0.09	8
MM3Z13VCW	ZJ	12.35	13	13.65	5	30	1	160	0.09	8
MM3Z15VCW	ZK	14.25	15	15.75	5	30	1	188	0.045	10.5

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Device Type	Device Marking	$V_Z @ I_{ZT}$ (Volts)			I_{ZT} (mA)	$Z_{ZT} @ I_{ZT}$ (Ω) Max	I_{ZK} (mA)	$Z_{ZK} @ I_{ZK}$ (Ω) Max	$I_R @ V_R$ (μA) Max	V_R (Volts)
		Min	Nom	Max						
MM3Z16VCW	ZL	15.20	16	16.80	5	40	1	188	0.045	11.2
MM3Z18VCW	ZM	17.10	18	18.90	5	45	1	212	0.045	12.6
MM3Z20VCW	ZN	19.00	20	21.00	5	55	1	212	0.045	14.0
MM3Z22VCW	ZP	20.90	22	23.10	5	55	1	235	0.045	15.4
MM3Z24VCW	ZR	22.80	24	25.20	5	70	1	235	0.045	16.8
MM3Z27VCW	ZS	25.65	27	28.35	2	80	0.5	282	0.045	18.9
MM3Z30VCW	ZT	28.50	30	31.50	2	80	0.5	282	0.045	21.0
MM3Z33VCW	ZU	31.35	33	34.65	2	80	0.5	306	0.045	23.0
MM3Z36VCW	ZV	34.20	36	37.80	2	90	0.5	329	0.045	25.2
MM3Z39VCW	ZW	37.05	39	40.95	2	130	0.5	329	0.045	27.3
MM3Z43VCW	ZX	40.85	43	45.15	2	150	0.5	353	0.045	30.1
MM3Z47VCW	ZY	44.65	47	49.35	2	170	0.5	353	0.045	33.0
MM3Z51VCW	Z-	48.45	51	53.55	2	180	0.5	376	0.045	35.7
MM3Z56VCW	Z=	53.20	56	58.80	2	200	0.5	400	0.045	39.2
MM3Z62VCW	Z≡	58.90	62	65.10	2	215	0.5	423	0.045	43.4
MM3Z68VCW	Z>	64.60	68	71.40	2	240	0.5	447	0.045	47.6
MM3Z75VCW	Z<	71.25	75	78.75	2	255	0.5	470	0.045	52.5

V_F Forward Voltage = 1 V Maximum @ $I_F = 10$ mA for all types

Notes:

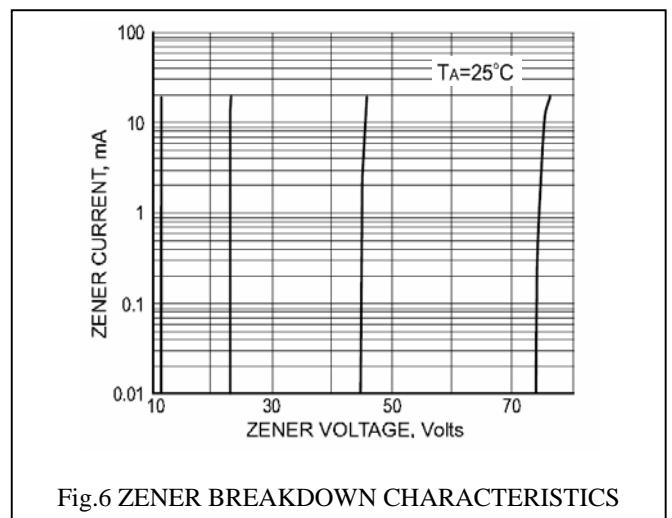
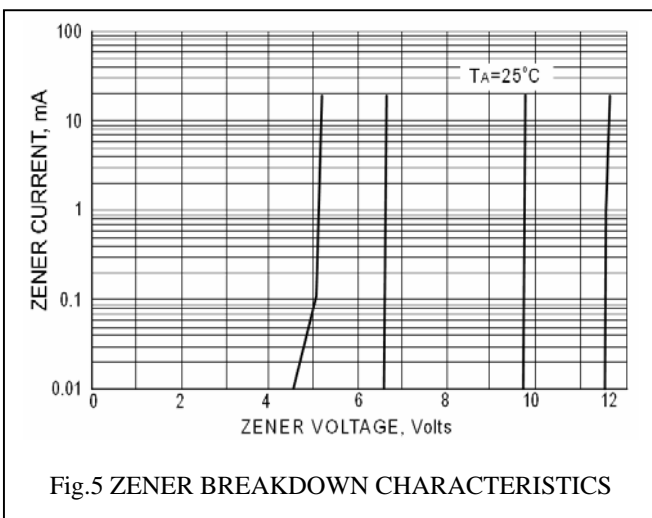
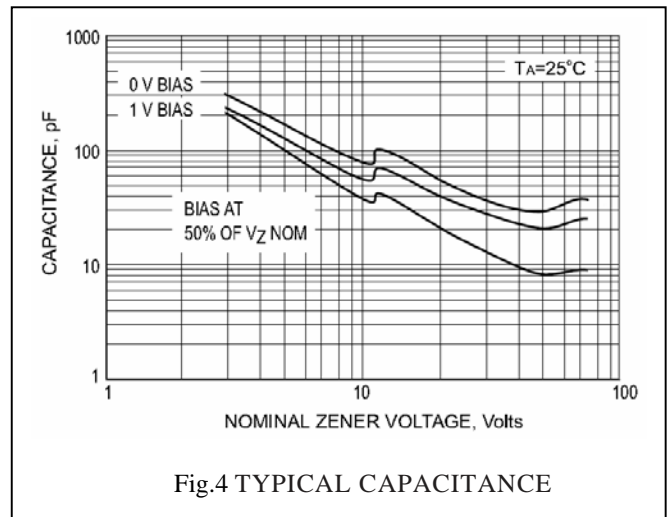
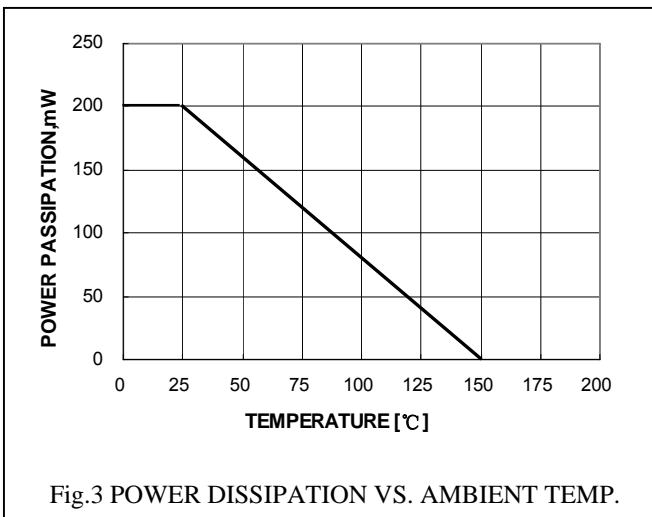
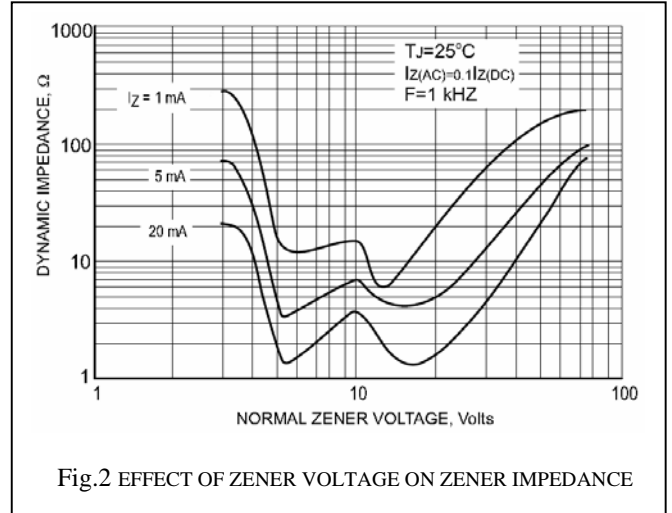
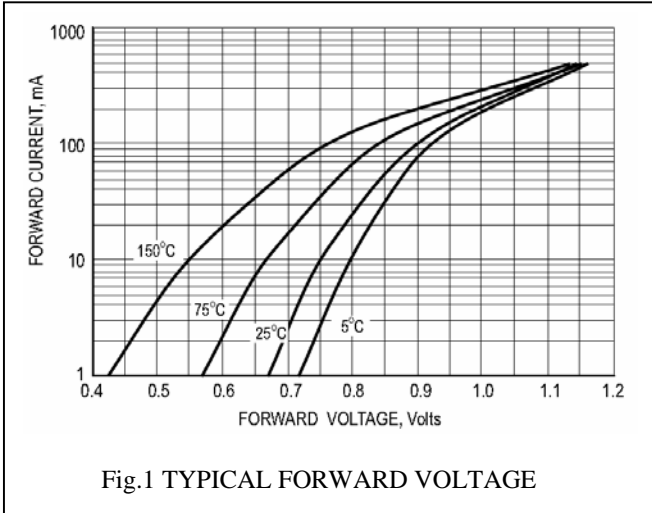
1. The Zener Voltage (V_Z) is tested under pulse condition of 10mS.
2. The device numbers listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.
3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK} .



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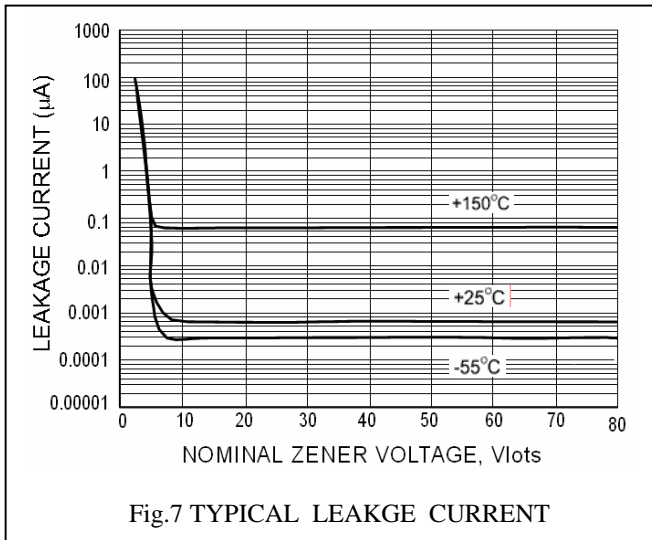
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RATING AND CHARACTERISTIC CURVES

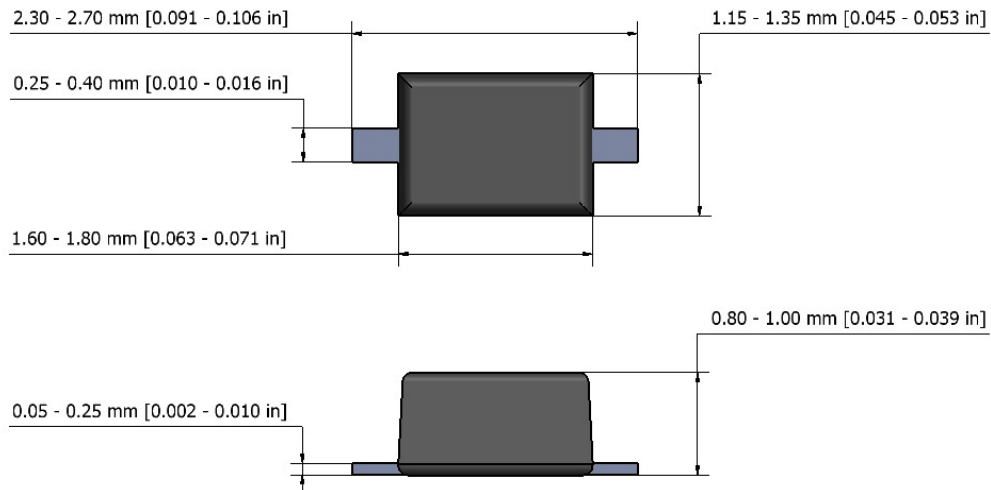


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SOD-323 Package Outline



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