



SOD-323 SURFACE MOUNT



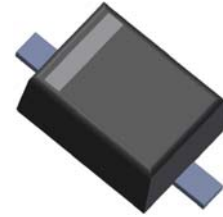
Small Outline Flat Lead Plastic Package

Zener Voltage Regulators

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P _D	Power Dissipation	200	mW
T _{STG}	Storage Temperature Range	-65 to +150	°C
T _{OPR}	Operating Temperature Range	-65 to +150	°C

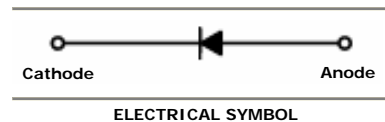
These ratings are limiting values above which the serviceability of the diode may be impaired.



SOD-323 Flat Lead

Specification Features:

- Wide Zener Voltage Range Selection, 4.3V to 75V
- VZ Tolerance Selection of ±2%
- 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_A = 25°C unless otherwise noted

Device Type	Device Marking	V _Z @ I _{ZT} (Volts)			I _{ZT} (mA)	Z _{VT} @ I _{ZT} (Ω) Max	Z _{ZK} @ I _{ZK} = 0.25mA (Ω) Max	I _R @ V _R (μA) Max	V _R (Volts)
		Min	Nom	Max					
MM3Z5229A	229C	4.214	4.3	4.386	20	22	2000	5	1
MM3Z5230A	230C	4.606	4.7	4.794	20	19	1900	5	2
MM3Z5231A	231C	4.998	5.1	5.202	20	17	1600	5	2
MM3Z5232A	232C	5.488	5.6	5.712	20	11	1600	5	3
MM3Z5233A	233C	5.88	6.0	6.12	20	7	1600	5	3.5
MM3Z5234A	234C	6.076	6.2	6.324	20	7	1000	5	4
MM3Z5235A	235C	6.664	6.8	6.936	20	5	750	3	5
MM3Z5236A	236C	7.35	7.5	7.65	20	6	500	3	6
MM3Z5237A	237C	8.036	8.2	8.364	20	8	500	3	6.5
MM3Z5238A	238C	8.526	8.7	8.874	20	8	600	3	6.5
MM3Z5239A	239C	8.918	9.1	9.282	20	10	600	3	7
MM3Z5240A	240C	9.8	10	10.2	20	17	600	3	8
MM3Z5241A	241C	10.78	11	11.22	20	22	600	2	8.4
MM3Z5242A	242C	11.76	12	12.24	20	30	600	1	9.1
MM3Z5243A	243C	12.74	13	13.26	9.5	13	600	0.5	9.9
MM3Z5244A	244C	13.72	14	14.28	9	15	600	0.1	10
MM3Z5245A	245C	14.7	15	15.3	8.5	16	600	0.1	11
MM3Z5246A	246C	15.68	16	16.32	7.8	17	600	0.1	12
MM3Z5247A	247C	16.66	17	17.34	7.4	19	600	0.1	13
MM3Z5248A	248C	17.64	18	18.36	7	21	600	0.1	14
MM3Z5249A	249C	18.62	19	19.38	6.6	23	600	0.1	14
MM3Z5250A	250C	19.6	20	20.4	6.2	25	600	0.1	15

DEVICE CHARACTERISTICS

MM3Z52xxA Series

Electrical Characteristics

T_A = 25°C unless otherwise noted

Device Type	Device Marking	V _Z @ I _{ZT} (Volts)			I _{ZT} (mA)	Z _{ZT} @ I _{ZT} (Ω) Max	Z _{ZK} @ I _{ZK} = 0.25mA (Ω) Max	I _R @ V _R (μA) Max	V _R (Volts)
		Min	Nom	Max					
MM3Z5251A	251C	21.56	22	22.44	5.6	29	600	0.1	17
MM3Z5252A	252C	23.52	24	24.48	5.2	33	600	0.1	18
MM3Z5253A	253C	24.5	25	25.5	5	35	600	0.1	19
MM3Z5254A	254C	26.46	27	27.54	4.6	41	600	0.1	21
MM3Z5255A	255C	27.44	28	28.56	4.5	44	600	0.1	21
MM3Z5256A	256C	29.4	30	30.6	4.2	49	600	0.1	23
MM3Z5257A	257C	32.34	33	33.66	3.8	58	700	0.1	25
MM3Z5258A	258C	35.28	36	36.72	3.4	70	700	0.1	27
MM3Z5259A	259C	38.22	39	39.78	3.2	80	800	0.1	30
MM3Z5260A	260C	42.14	43	43.86	3	93	900	0.1	33
MM3Z5261A	261C	46.06	47	47.94	2.7	105	1000	0.1	36
MM3Z5262A	262C	49.98	51	52.02	2.5	125	1100	0.1	39
MM3Z5263A	263C	54.88	56	57.12	2.2	150	1300	0.1	43
MM3Z5264A	264C	58.8	60	61.2	2.1	170	1400	0.1	46
MM3Z5265A	265C	60.76	62	63.24	2.0	185	1400	0.1	47
MM3Z5266A	266C	66.64	68	69.36	1.8	230	1600	0.1	52
MM3Z5267A	267C	73.5	75	76.5	1.7	270	1700	0.1	56

V_F Forward Voltage = 900mV Maximum @ I_F = 10 mA for all types

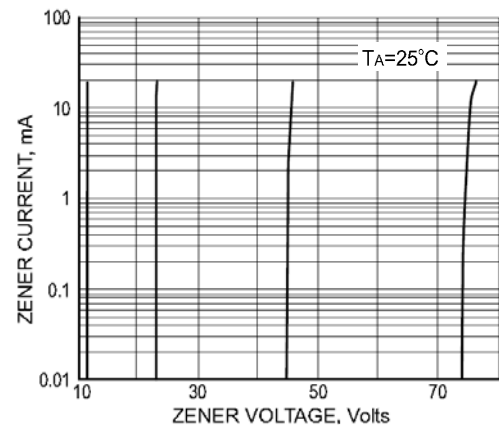
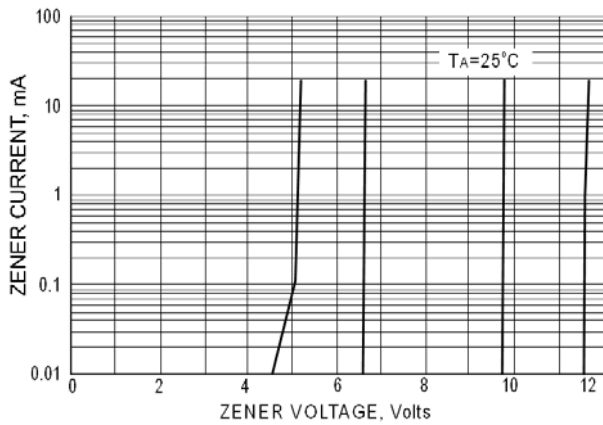
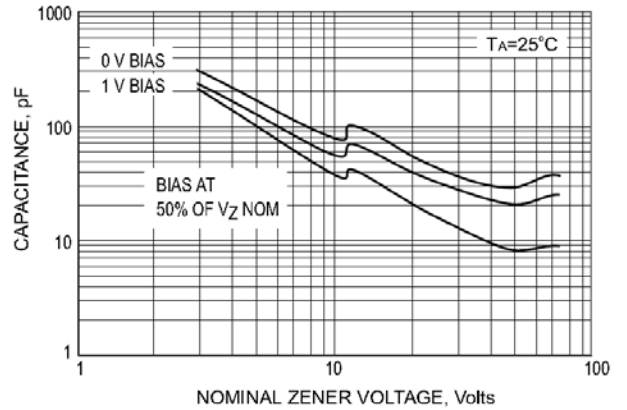
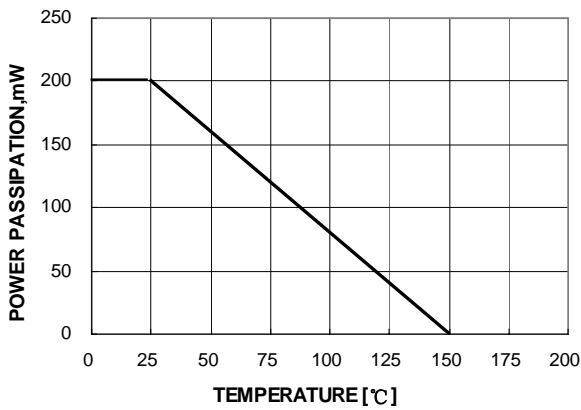
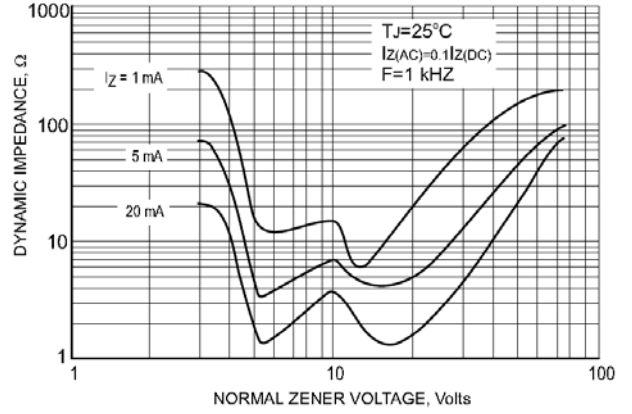
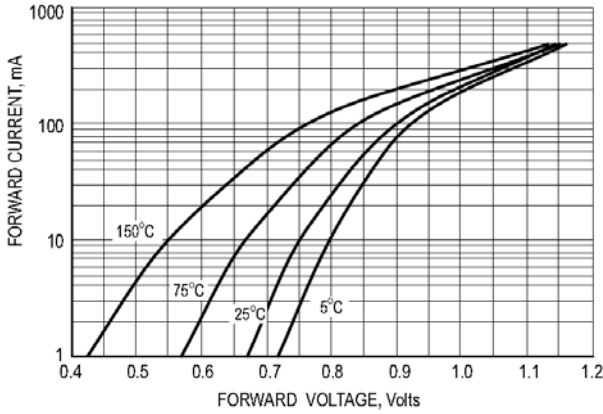
Notes:

1. The zener voltage (V_Z) is tested under pulse condition of 1mS.
2. The device numbers listed have a standard tolerance on the nominal zener voltage of ±2%.
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}.

DEVICE CHARACTERISTICS

MM3Z52xxA Series

RATING AND CHARACTERISTIC CURVES



PACKAGE OUTLINE AND DIMENSIONS

MM3Z52xxA Series

RATING AND CHARACTERISTIC CURVES

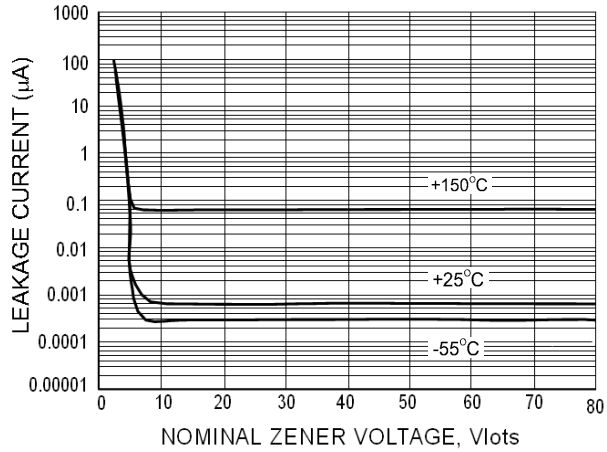
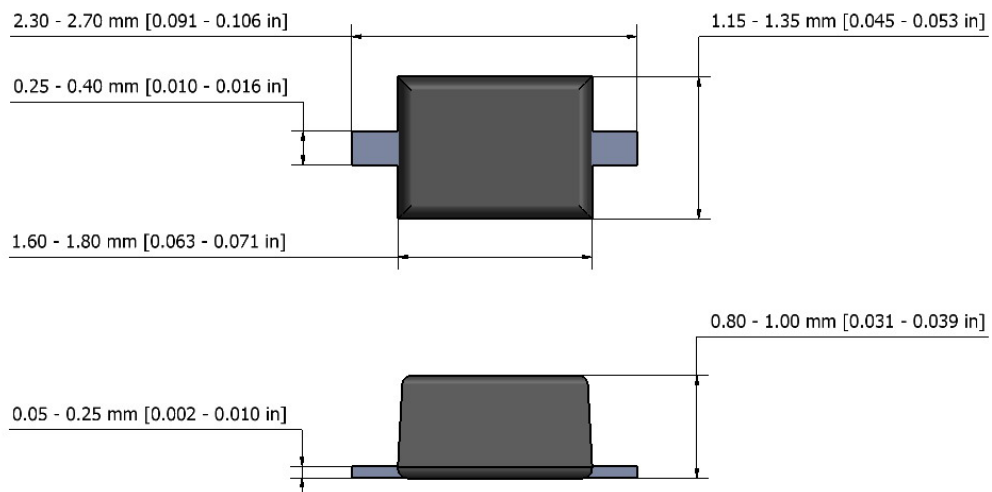


Fig.7 TYPICAL LEAKGE CURRENT

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.