

Features

- Standard Vz Tolerance is $\pm 2\%$
- Wide Voltage Range Available
- Surface Mount Package



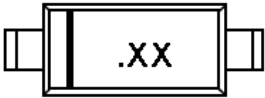
Mechanical Data

- Package: SOD-323 package name
- Moisture Sensitivity: Level 1, per J-STD-020
- Halogen Free. "Green" Device (Note1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish & RoHS Compliant
- Weight: 0.004 g (approximate)



SOD-323

Body Marking and Pin Layout

Body Marking	Internal structure
 XX: Device Marking Code¹ Bar: Cathode Pin Dot (optional): Manufacturing site marking ¹ Refer to the Marking Code for the specific device code.	

Ordering Information

Product Name	Reel Size	Packing Type	Qty/Reel
MMXZ5229C THRU MMXZ5262C-TP	7"	Tape & Reel	3,000
MMXZ5229C THRU MMXZ5262C-13P	13"	Tape & Reel	10,000

For packaging details, visit our website at <https://www.mccsemi.com/Package/List>

Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Power Dissipation ^(Note2)	P_D	200	mW
Maximum Instantaneous Forward Voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Operating Junction Temperature Range	T_J	-55 to 150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to 150	$^{\circ}\text{C}$

Thermal characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Thermal Resistance from Junction to Ambient ^(Note 2)	$R_{\theta JA}$	625	$^{\circ}\text{C/W}$

Notes:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. Mounted on PCB.

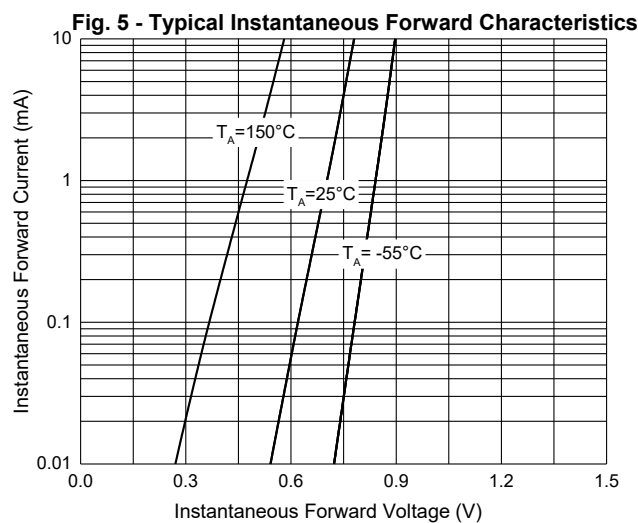
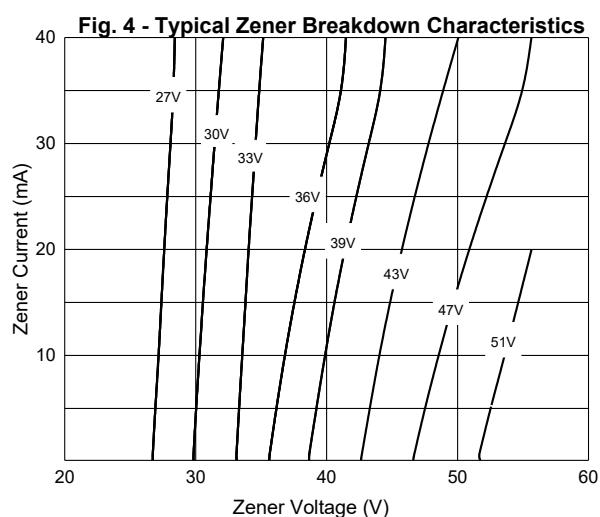
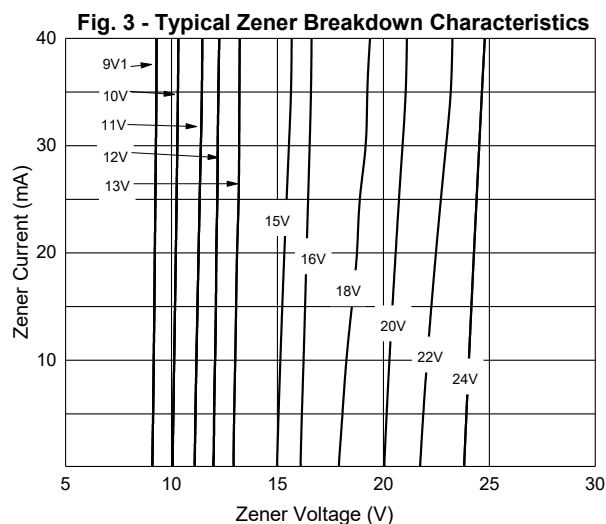
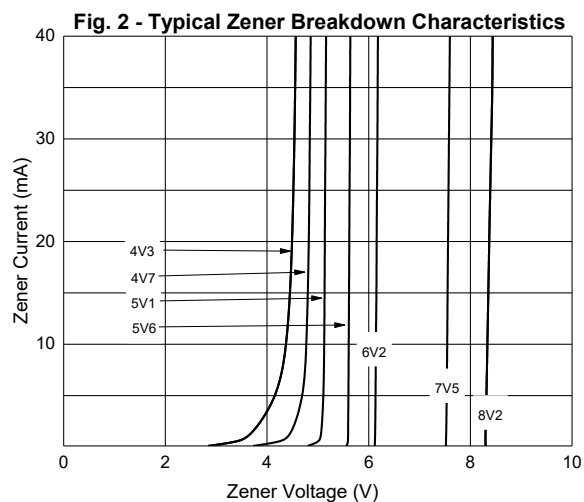
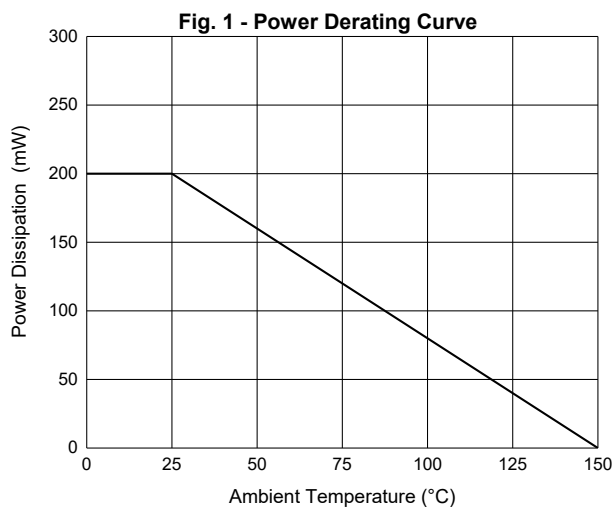
Electrical Characteristics (T_A=25°C unless otherwise specified)

Part Number	Zener Voltage ^(Note 3)			Test Current		Maximum Dynamic Impedance		Maximum Reverse Leakage Current		Typical Temperature Coefficient		Marking Code
	V _Z @I _{ZT}			I _{ZT}	I _{ZK}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _R	V _R	S _Z @I _{ZT}		
	Min(V)	Typ(V)	Max(V)	mA	mA	Ω	Ω	μA	V	Min (mV/°C)	Max (mV/°C)	
MMXZ5229C	4.21	4.3	4.39	20	0.25	22	2000	5	1	-3.5	0	D4
MMXZ5230C	4.61	4.7	4.79	20	0.25	19	1900	5	2	-3.5	0	D5
MMXZ5231C	5	5.1	5.2	20	0.25	17	1600	5	2	-3.5	0	E1
MMXZ5232C	5.49	5.6	5.71	20	0.25	11	1600	5	3	-3.5	0	E2
MMXZ5233C	5.88	6	6.12	20	0.25	7	1600	5	3.5	-3.5	0	E3
MMXZ5234C	6.08	6.2	6.32	20	0.25	7	1000	5	4	-3.5	0	E4
MMXZ5235C	6.66	6.8	6.94	20	0.25	5	750	3	5	-3.5	0.2	E5
MMXZ5236C	7.35	7.5	7.65	20	0.25	6	500	3	6	-2.7	1.2	F1
MMXZ5237C	8.04	8.2	8.36	20	0.25	8	500	3	6	-2	2.5	F2
MMXZ5238C	8.53	8.7	8.87	20	0.25	8	600	3	6.5	0.4	3.7	F3
MMXZ5239C	8.92	9.1	9.28	20	0.25	10	600	3	6.5	1.2	4.5	F4
MMXZ5240C	9.8	10	10.2	20	0.25	17	600	3	8	2.5	5.3	F5
MMXZ5241C	10.78	11	11.22	20	0.25	22	600	2	8.4	3.2	6.2	H1
MMXZ5242C	11.76	12	12.24	20	0.25	30	600	1	9.1	3.8	7	H2
MMXZ5243C	12.74	13	13.26	9.5	0.25	13	600	0.5	9.9	4.5	8	H3
MMXZ5244C	13.72	14	14.28	9	0.25	15	600	0.1	10.5	5.4	9	H4
MMXZ5245C	14.7	15	15.3	8.5	0.25	16	600	0.1	11	6	10	H5
MMXZ5246C	15.68	16	16.32	7.8	0.25	17	600	0.1	12	7	11	J1
MMXZ5247C	16.66	17	17.34	7.5	0.25	19	600	0.1	13	9.2	13	J2
MMXZ5248C	17.64	18	18.36	7	0.25	21	600	0.1	14	10.4	14	J3
MMXZ5249C	18.62	19	19.38	6.6	0.25	23	600	0.1	14	12.4	16	J4
MMXZ5250C	19.6	20	20.4	6.2	0.25	25	600	0.1	15	14.4	18	J5
MMXZ5251C	21.56	22	22.44	5.6	0.25	29	600	0.1	17	16.4	20	K1
MMXZ5252C	23.52	24	24.48	5.2	0.25	33	600	0.1	18	18.4	22	K2
MMXZ5253C	24.5	25	25.5	5	0.25	35	600	0.1	19	21.4	25.3	K3
MMXZ5254C	26.46	27	27.54	5	0.25	41	600	0.1	21	24.4	29.4	K4
MMXZ5255C	27.44	28	28.56	4.5	0.25	44	600	0.1	21	27.4	33.4	K5
MMXZ5256C	29.4	30	30.6	4.2	0.25	49	600	0.1	23	30.4	37.4	M1
MMXZ5257C	32.34	33	33.66	3.8	0.25	58	700	0.1	25	33.4	41.2	M2
MMXZ5258C	35.28	36	36.72	3.4	0.25	70	700	0.1	27	-3.5	0	M3
MMXZ5259C	38.22	39	39.78	3.2	0.25	80	800	0.1	30	-3.5	0	M4
MMXZ5260C	42.14	43	43.86	3	0.25	93	900	0.1	33	-3.5	0	M5
MMXZ5261C	46.06	47	47.94	2.7	0.25	105	1000	0.1	36	-3.5	0	N1
MMXZ5262C	49.98	51	52.02	2.5	0.25	125	1100	0.1	39	-3.5	0	N2

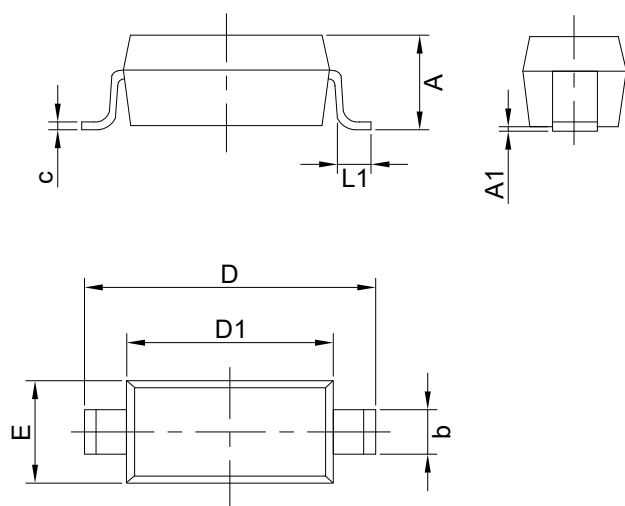
Notes:

3. Short-duration test pulses are used to minimize the self-heating effect.

Curve Characteristics



Package Outline

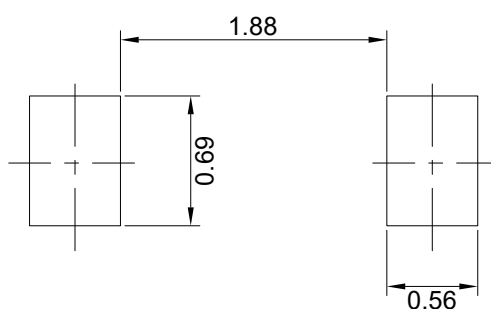


DIM	INCH		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.031	0.045	0.80	1.15*	Note 1
A1	0.000	0.006	0.00	0.15	
b	0.010	0.016	0.25	0.40	
c	0.003	0.010	0.08	0.25	
D	0.090	0.107	2.30	2.70	
D1	0.063	0.071	1.60	1.80	
E	0.045	0.055	1.15	1.40	
L1	0.004	0.018	0.10	0.45	

Notes:

1. Dimension A for products from manufacturing site VN is controlled at max 1.10 mm.

Suggested Pad Layout (Unit:mm)



Notes:

1. The suggested land pattern dimensions have been provided for reference only.
2. For further information, please refer to document IPC-7351A.

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