

Zener Diodes

4.3~51V 500mW SOD-123

MMSZ5229C Series

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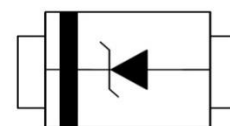
FEATURE

- Zener Voltage Range: 4.3V to 51V
- Power Dissipation: 500mW
- Silicon Planar Zener Diode in SOD-123 package
- Ideally Suited for Automated Assembly Processes
- Application: Power Management Systems, Voltage Regulation



MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Band Marking denotes cathode end



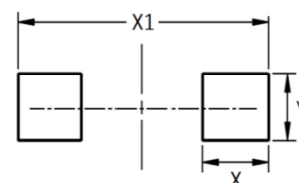
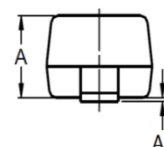
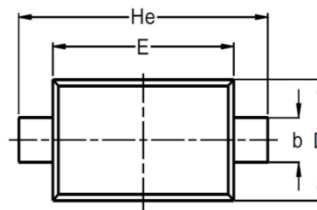
MAXIMUM RATINGS (TA=25 °C unless otherwise noted)



Parameter	Symbols	Value	Unit
Power Dissipation ^(Note 1)	P _D	500	mW
Junction Temperature	T _J	-50~+150	°C
Storage Temperature Range	T _{STG}	-50~+150	°C

DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.95	1.35
A1	-	0.12
b	0.50	0.70
C	-	0.20
D	1.40	1.80
E	2.50	2.80
He	3.60	3.90
L	0.40	-
X	0.97	0.97
X1	3.60	3.90
Y	1.22	1.22



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ELECTRICAL CHARACTERISTICS (TA=25 °C unless otherwise noted)

Part Number	Nominal Zener Voltage V _Z at I _{ZT}			Max Zener Impedance Z _{ZT} at I _{ZT} , Z _{ZK} at I _{ZK} =0.25mA			Reverse Leakage Current I _R at V _R	
	Nom	Min	Max	Z _{ZT}	I _{ZT}	Z _{ZK}	I _R max	V _R
	(V)	(V)	(V)	(Ω)	(mA)	(Ω)	(μA)	(V)
MMSZ5229C	4.3	4.21	4.39	22	20	2000	5.0	1.0
MMSZ5230C	4.7	4.61	4.79	19	20	1900	5.0	2.0
MMSZ5231C	5.1	5.00	5.20	17	20	1600	5.0	2.0
MMSZ5232C	5.6	5.49	5.71	11	20	1600	5.0	3.0
MMSZ5234C	6.2	6.08	6.32	7	20	1000	5.0	4.0
MMSZ5235C	6.8	6.66	6.94	5	20	750	3.0	5.0
MMSZ5236C	7.5	7.35	7.65	6	20	500	3.0	6.0
MMSZ5237C	8.2	8.04	8.36	8	20	500	3.0	6.0
MMSZ5238C	8.7	8.53	8.87	8	20	600	3.0	6.5
MMSZ5239C	9.1	8.92	9.28	10	20	600	3.0	6.5
MMSZ5240C	10	9.80	10.20	17	20	600	3.0	8.0
MMSZ5241C	11	10.78	11.22	22	20	600	3.0	8.4
MMSZ5242C	12	11.76	12.24	30	20	600	2.0	9.1
MMSZ5243C	13	12.74	13.26	13	9.5	600	1.0	9.9
MMSZ5244C	14	13.72	14.28	15	9.0	600	0.5	10.5
MMSZ5245C	15	14.70	15.30	16	8.5	600	0.5	11.0
MMSZ5246C	16	15.68	16.32	17	7.8	600	0.1	12.0
MMSZ5247C	17	16.66	17.34	19	7.5	600	0.1	13.0
MMSZ5248C	18	17.64	18.36	21	7.0	600	0.1	14.0
MMSZ5250C	20	19.60	20.40	25	6.2	600	0.1	15.0
MMSZ5251C	22	21.56	22.44	29	5.6	600	0.1	17.0
MMSZ5252C	24	23.52	24.48	33	5.2	600	0.1	18.0
MMSZ5254C	27	26.46	27.54	41	5.0	600	0.1	21.0
MMSZ5255C	28	27.44	28.56	44	4.5	600	0.1	21.0
MMSZ5256C	30	29.40	30.60	49	4.2	600	0.1	23.0
MMSZ5257C	33	32.34	33.66	58	3.8	700	0.1	25.0
MMSZ5258C	36	35.28	36.72	70	3.4	700	0.1	27.0
MMSZ5259C	39	38.22	39.78	80	3.2	800	0.1	30.0
MMSZ5260C	43	42.14	43.86	93	3.0	900	0.1	33.0
MMSZ5261C	47	46.06	47.94	105	2.7	1000	0.1	36.0
MMSZ5262C	51	49.98	52.02	125	2.5	1100	0.1	39.0

Notes:

1. Mounted on 5.0mm² (0.013mm thick) land areas.

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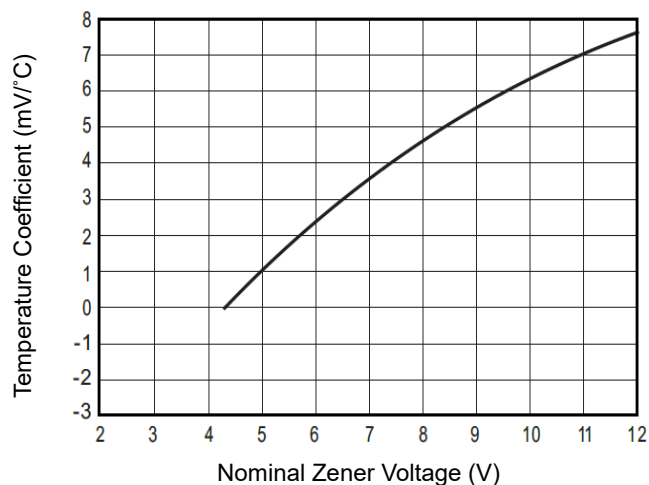
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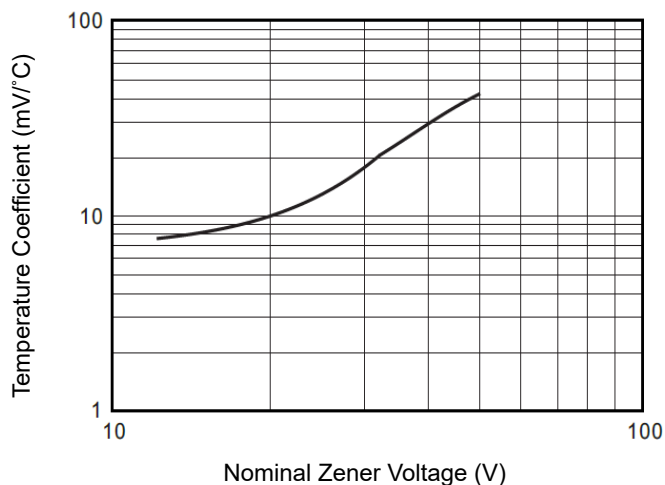
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CHARACTERISTIC CURVES

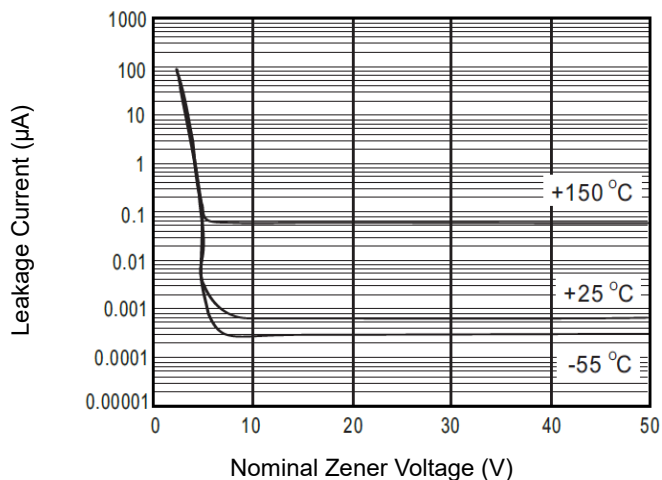
Temperature Coefficient



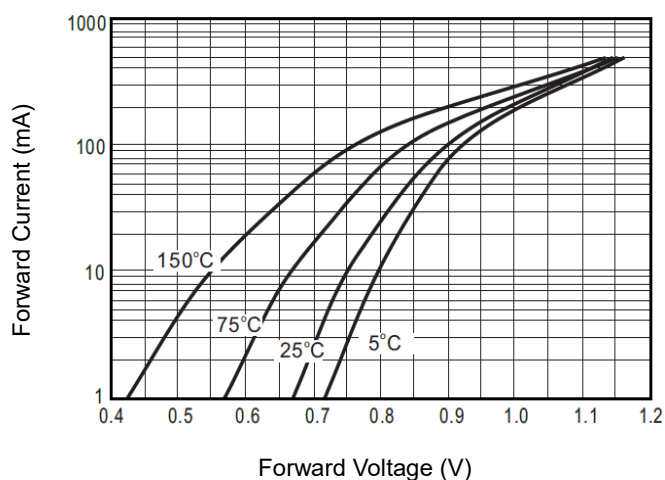
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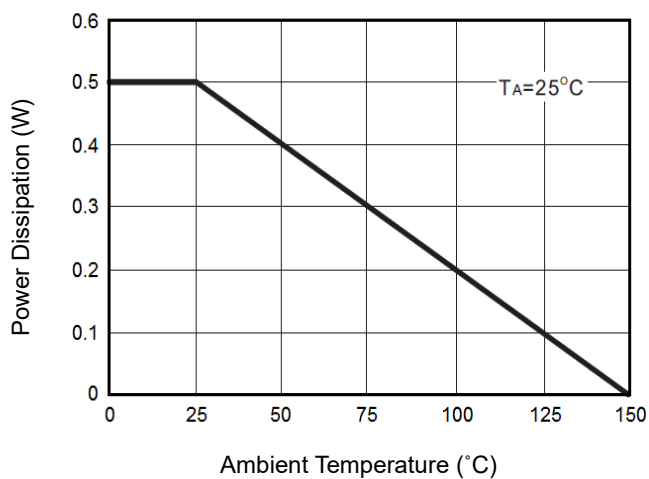
Typical Leakage Current



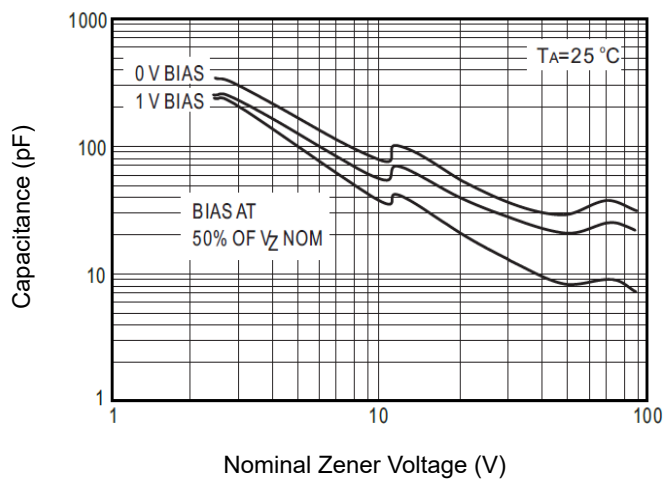
Typical Forward Voltage



Steady-State Power Derating



Typical Capacitance

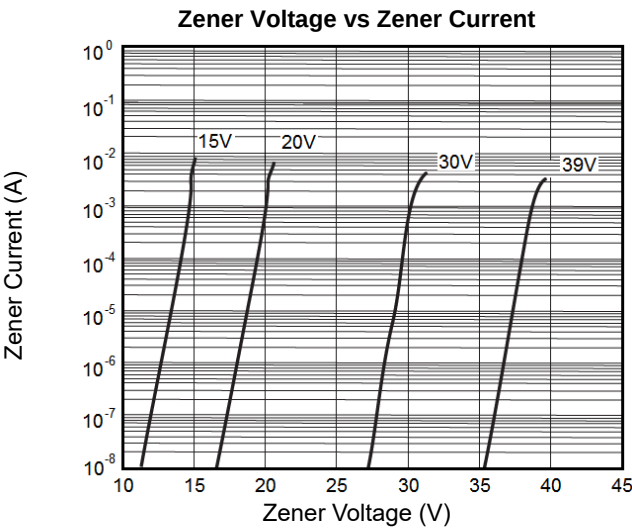
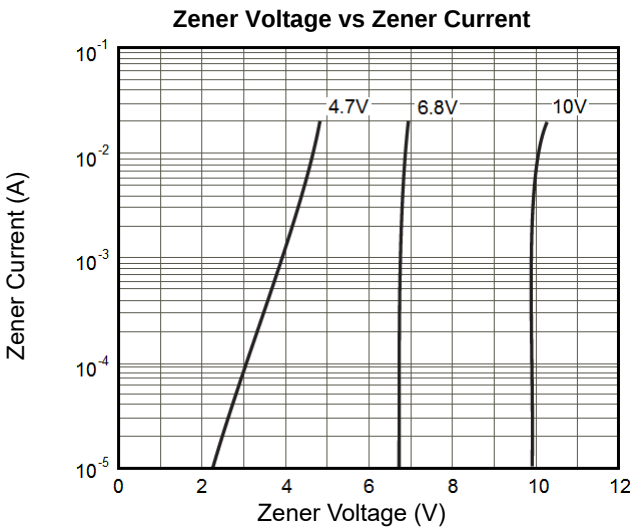


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CHARACTERISTIC CURVES



*Specifications subject to change without notice.