

Zibo Seno Electronic Engineering Co., Ltd.



MMSZ5221BG- MMSZ5260BG



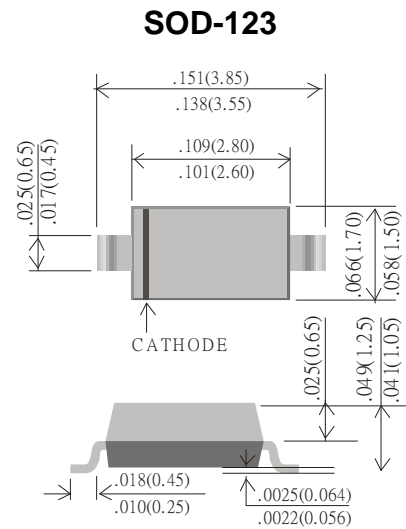
500mW SURFACE MOUNT ZENER DIODE

Features

- Planar Die Construction
- Sealed Glass Case
- Ideally Suited for Automated Insertion
- 2.4V - 43V Nominal Zener Voltages

Mechanical Data

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Approx. Weight: 0.01 grams
- **Lead Free: For RoHS / Lead Free Version**



Dimensions in inch & mm

Downloaded from alldatasheet.com

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	P _d	500	mW
Forward Voltage @ I _F = 10mA	V _F	0.9	V
Thermal Resistance, Junction to Ambient Air (Note 2)	R _{θJA}	350	K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

NOTE: 1.DEVICE MOUNTED ON CERAMIC PCB:7.6mm x 9.4mm x 0.87mm WITH PAD AREAS 25mm².
2.TESTED WITH PULSES,T_p ≤ 1.0ms.

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Electrical Characteristics @ T_A = 25°C unless otherwise specified

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current	
	V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R	
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V
MMSZ5221BG	2.4	2.28	2.52	30	20.0	1200	0.25	100	1.0
MMSZ5223BG	2.7	2.57	2.84	30	20.0	1300	0.25	75	1.0
MMSZ5225BG	3.0	2.85	3.15	30	20.0	1600	0.25	50	1.0
MMSZ5226BG	3.3	3.14	3.47	28	20.0	1600	0.25	25	1.0
MMSZ5227BG	3.6	3.42	3.78	24	20.0	1700	0.25	15	1.0
MMSZ5228BG	3.9	3.71	4.10	23	20.0	1900	0.25	10	1.0
MMSZ5229BG	4.3	4.09	4.52	22	20.0	2000	0.25	5.0	1.0
MMSZ5230BG	4.7	4.47	4.94	19	20.0	1900	0.25	5.0	2.0
MMSZ5231BG	5.1	4.85	5.36	17	20.0	1600	0.25	5.0	2.0
MMSZ5232BG	5.6	5.32	5.88	11	20.0	1600	0.25	5.0	3.0
MMSZ5233BG	6.0	5.70	6.30	7	20.0	1600	0.25	5.0	3.5
MMSZ5234BG	6.2	5.89	6.51	7	20.0	1000	0.25	5.0	4.0
MMSZ5235BG	6.8	6.46	7.14	5	20.0	750	0.25	3.0	5.0
MMSZ5236BG	7.5	7.13	7.88	6	20.0	500	0.25	3.0	6.0
MMSZ5237BG	8.2	7.79	8.61	8	20.0	500	0.25	3.0	6.5
MMSZ5238BG	8.7	8.27	9.14	8	20.0	600	0.25	3.0	6.5
MMSZ5239BG	9.1	8.65	9.56	10	20.0	600	0.25	3.0	7.0
MMSZ5240BG	10	9.50	10.50	17	20.0	600	0.25	3.0	8.0
MMSZ5241BG	11	10.45	11.55	22	20.0	600	0.25	2.0	8.4
MMSZ5242BG	12	11.40	12.60	30	20.0	600	0.25	1.0	9.1
MMSZ5243BG	13	12.35	13.65	13	9.5	600	0.25	0.5	9.9
MMSZ5244BG	14	13.30	14.70	15	9.0	600	0.25	0.1	10.0
MMSZ5245BG	15	14.25	15.75	16	8.5	600	0.25	0.1	11.0
MMSZ5246BG	16	15.20	16.80	17	7.8	600	0.25	0.1	12.0
MMSZ5248BG	18	17.10	18.90	21	7.0	600	0.25	0.1	14.0
MMSZ5250BG	20	19.00	21.00	25	6.2	600	0.25	0.1	15.0
MMSZ5251BG	22	20.90	23.10	29	5.6	600	0.25	0.1	17.0
MMSZ5252BG	24	22.80	25.20	33	5.2	600	0.25	0.1	18.0
MMSZ5254BG	27	25.65	28.35	41	5.0	600	0.25	0.1	21.0
MMSZ5255BG	28	26.60	29.40	44	4.5	600	0.25	0.1	21.0
MMSZ5256BG	30	28.50	31.50	49	4.2	600	0.25	0.1	23.0
MMSZ5257BG	33	31.35	34.65	58	3.8	700	0.25	0.1	25.0
MMSZ5258BG	36	34.20	37.80	70	3.4	700	0.25	0.1	27.0
MMSZ5259BG	39	37.05	40.95	80	3.2	800	0.25	0.1	30.0
MMSZ5260BG	43	40.85	45.15	93	3.0	900	0.25	0.1	33.0

1) Based on DC-measurement at thermal equilibrium while maintaining the lead temperature(T_L) at 30°C, 9.5mm (3/8") from the diode body.

Characteristics ($T_j=25^\circ\text{C}$ unless otherwise specified)

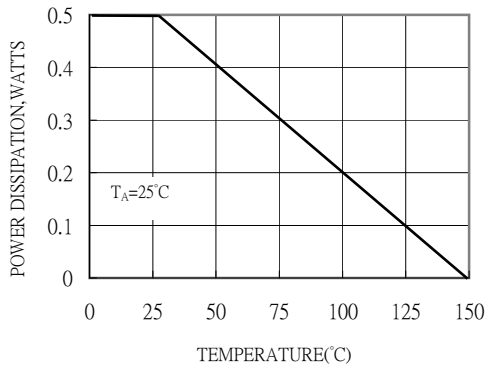


Fig.1-STEADY STATE POWER DERATING

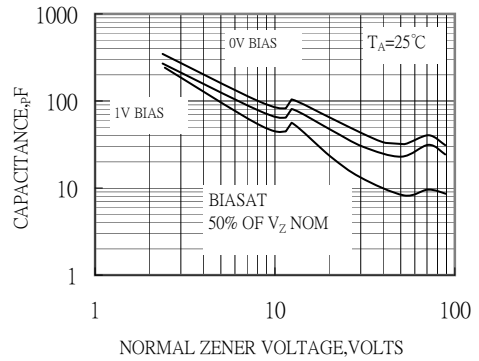


Fig.2-TYPICAL CAPACITANCE

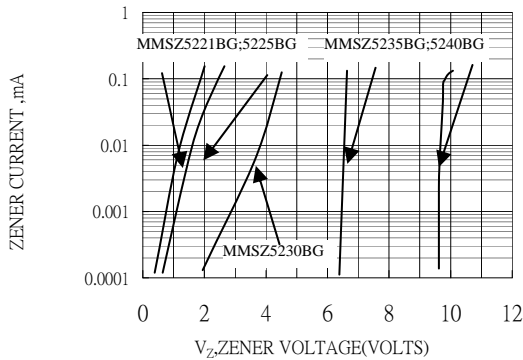


Fig.3A- $V_z=2.4$ THRU 1.0 VOLTS

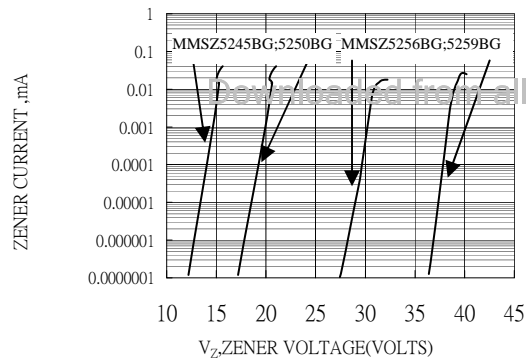


Fig.3B- $V_z=12$ THRU 39 VOLTS

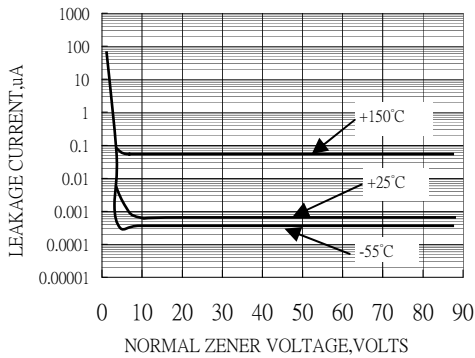


Fig.4-TYPICAL LEAKAGE CURRENT