

SENSITRON
SEMICONDUCTOR

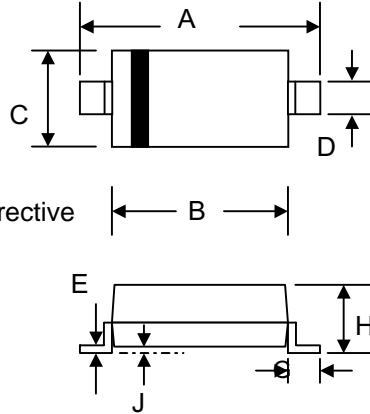
MMSZ5221B-G-MMSZ5259B-G
500mW SURFACE MOUNT ZENER DIODE

Data Sheet 5206, Rev.—

Green Products

Features

- Planar Die Construction
- 500mW Power Dissipation
- 2.4-39V Nominal Zener Voltage
- 5% Standard Vz Tolerance
- Designed for Surface Mount Application
- Plastic Material –UL Recognition Flammability Classification 94V-O
- Green Products in Compliance with the RoHS Directive



SOD-123		
Dim	Min	Max
A	3.6	3.9
B	2.5	2.8
C	1.4	1.8
D	0.5	0.7
E	—	0.2
G	0.4	—
H	0.95	1.35
J	—	0.12
All Dimensions in mm		

Mechanical Data

- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.01 grams (approx.)

Maximum Ratings @TA=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation at TA=25°C	Pd	500	mW
Typical Thermal Resistance, Junction to Ambient Air	RθJA	340	°C/W
Forward Voltage Drop @ IF = 10mA	VF	0.9	V
Operating and Storage Temperature Range	Tj, TSTG	-65 to +150	°C

Type Number (Note 1)	Device Marking Code	Nominal Zener Voltage $V_z@I_{zT}$	Test Current I_{zT}	Maximum Zener impedance		Maximum reverse leakage current		Typical Temp. Coefficient of Zener Voltage %/k
				$Z_{zT}@I_{zT}$	$Z_{zK}@I_{zK}=0.25mA$	I_R	Test Voltage $V_R(V)$	
				mA	Ω	Ω	UA	
MMSZ5221B-G	C1	2.4	20	30	1200	100	1.0	-0.075
MMSZ5222B-G	C2	2.5	20	30	1200	100	1.0	-0.075
MMSZ5223B-G	C3	2.7	20	30	1300	75	1.0	-0.075
MMSZ5225B-G	C5	3.0	20	30	1600	50	1.0	-0.075
MMSZ5226B-G	D1	3.3	20	28	1600	25	1.0	-0.070
MMSZ5227B-G	D2	3.6	20	24	1700	15	1.0	-0.065
MMSZ5228B-G	D3	3.9	20	23	1900	10	1.0	-0.060
MMSZ5229B-G	D4	4.3	20	22	2000	5	1.0	-0.055
MMSZ5230B-G	D5	4.7	20	19	1900	5	2.0	± 0.030
MMSZ5231B-G	E1	5.1	20	17	1600	5	2.0	± 0.030
MMSZ5232B-G	E2	5.6	20	11	1600	5	3.0	+0.038
MMSZ5234B-G	E4	6.2	20	7	1000	5	4.0	+0.045
MMSZ5235B-G	E5	6.8	20	5	750	3	5.0	+0.050
MMSZ5236B-G	F1	7.5	20	6	500	3	6.0	+0.058
MMSZ5237B-G	F2	8.2	20	8	500	3	6.5	+0.062
MMSZ5239B-G	F4	9.1	20	10	600	3	7.0	+0.068
MMSZ5240B-G	F5	10	20	17	600	3	8.0	+0.075
MMSZ5241B-G	H1	11	20	22	600	2	8.4	+0.076
MMSZ5242B-G	H2	12	20	30	600	1	9.1	+0.077
MMSZ5243B-G	H3	13	9.5	13	600	0.5	9.9	+0.079
MMSZ5245B-G	H5	15	8.5	16	600	0.1	11	+0.082
MMSZ5246B-G	J1	16	7.8	17	600	0.1	12	+0.083
MMSZ5248B-G	J3	18	7.0	21	600	0.1	14	+0.085
MMSZ5250B-G	J5	20	6.2	25	600	0.1	15	+0.086
MMSZ5251B-G	K1	22	5.6	29	600	0.1	17	+0.087
MMSZ5252B-G	K2	24	5.2	33	600	0.1	18	+0.087
MMSZ5254B-G	K4	27	4.6	41	600	0.1	21	+0.090
MMSZ5255B-G	K5	28	4.5	44	600	0.1	21	+0.091
MMSZ5256B-G	M1	30	4.2	49	600	0.1	23	+0.091
MMSZ5257B-G	M2	33	3.8	58	700	0.1	25	+0.092
MMSZ5258B-G	M3	36	3.4	70	700	0.1	27	+0.093
MMSZ5259B-G	M4	39	3.2	80	800	0.1	30	+0.094

Note: 1.Type numbers listed have standard tolerance on the nominal zener voltage of $\pm 5\%$.

2.Measured with pulses $t_p=1ms$

3.f=1KHZ

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