



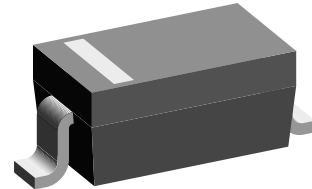
Small Signal Zener Diodes

Features

- Silicon planar power Zener diodes.
- Standard Zener voltage tolerance is $\pm 5\%$ with a "B" suffix (e.g.: MMSZ5225B-V-G), suffix "C" is $\pm 2\%$ tolerance
- AEC-Q101 qualified
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



RoHS
COMPLIANT
GREEN
(5-2008)**



17431

Mechanical Data

Case: SOD-123

Weight: approx. 10.3 mg

Packaging codes/options:

18/10K per 13 " reel (8 mm tape), 10K/box

08/3K per 7 " reel (8 mm tape), 15K/box

Absolute Maximum Ratings

$T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Zener current (see table "Characteristics")				
Power dissipation	$T_L = 75\text{ }^{\circ}\text{C}$	P_{tot}	500 ¹⁾	mW

¹⁾ On FR - 4 or FR - 5 board with minimum recommended solder pad layout.

Thermal Characteristics

$T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air		R_{thJA}	340 ¹⁾	K/W
Maximum junction temperature		T_j	150	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	- 65 to + 175	$^{\circ}\text{C}$

¹⁾ On FR - 4 or FR - 5 board with minimum recommended solder pad layout.

** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

MMSZ5225-V-G to MMSZ5267-V-G



Vishay Semiconductors

Electrical Characteristics

Maximum $V_F = 0.9$ V, at $I_F = 10$ mA

Part number	Marking code		Nominal Zener voltage ²⁾	Test current	Maximum dynamic impedance ¹⁾		Typical temperature of coefficient	Maximum reverse leakage current	
	± 2 %	± 5 %	V_Z at I_{ZT}	I_{ZT}	Z_{ZT} at I_{ZT}	Z_{ZK} at $I_{ZK} = 0.25$ mA	α_{VZ}	I_R	V_R
			V	mA	Ω	Ω	%/°C	μ A	V
MMSZ5225-V-G	C.0	C0	3	20	30	1600	- 0.075	50	1
MMSZ5226-V-G	D.6	D6	3.3	20	28	1600	- 0.070	25	1
MMSZ5227-V-G	D.7	D7	3.6	20	24	1700	- 0.065	15	1
MMSZ5228-V-G	D.8	D8	3.9	20	23	1900	- 0.060	10	1
MMSZ5229-V-G	D.9	D9	4.3	20	22	2000	- 0.055	5	1
MMSZ5230-V-G	D.0	D0	4.7	20	19	1900	± 0.030	5	2
MMSZ5231-V-G	E.6	E6	5.1	20	17	1600	± 0.030	5	2
MMSZ5232-V-G	E.7	E7	5.6	20	11	1600	+ 0.038	5	3
MMSZ5233-V-G	E.8	E8	6	20	7	1600	+ 0.038	5	3.5
MMSZ5234-V-G	E.9	E9	6.2	20	7	1000	+ 0.045	5	4
MMSZ5235-V-G	E.0	E0	6.8	20	5	750	+ 0.050	3	5
MMSZ5236-V-G	F.6	F6	7.5	20	6	500	+ 0.058	3	6
MMSZ5237-V-G	F.7	F7	8.2	20	8	500	+ 0.062	3	6.5
MMSZ5238-V-G	F.8	F8	8.7	20	8	600	+ 0.065	3	6.5
MMSZ5239-V-G	F.9	F9	9.1	20	10	600	+ 0.068	3	7
MMSZ5240-V-G	F.0	F0	10	20	17	600	+ 0.075	3	8
MMSZ5241-V-G	H.6	H6	11	20	22	600	+ 0.076	2	8.4
MMSZ5242-V-G	H.7	H7	12	20	30	600	+ 0.077	1	9.1
MMSZ5243-V-G	H.8	H8	13	9.5	13	600	+ 0.079	0.5	9.9
MMSZ5244-V-G	H.9	H9	14	9	15	600	+ 0.082	0.1	10
MMSZ5245-V-G	H.0	H0	15	8.5	16	600	+ 0.082	0.1	11
MMSZ5246-V-G	J.6	J6	16	7.8	17	600	+ 0.083	0.1	12
MMSZ5247-V-G	J.7	J7	17	7.4	19	600	+ 0.084	0.1	13
MMSZ5248-V-G	J.8	J8	18	7	21	600	+ 0.085	0.1	14
MMSZ5249-V-G	J.9	J9	19	6.6	23	600	+ 0.086	0.1	14
MMSZ5250-V-G	J.0	J0	20	6.2	25	600	+ 0.086	0.1	15
MMSZ5251-V-G	K.6	K6	22	5.6	29	600	+ 0.087	0.1	17
MMSZ5252-V-G	K.7	K7	24	5.2	33	600	+ 0.087	0.1	18
MMSZ5253-V-G	K.8	K8	25	5	35	600	+ 0.089	0.1	19
MMSZ5254-V-G	K.9	K9	27	4.6	41	600	+ 0.090	0.1	21
MMSZ5255-V-G	K.0	K0	28	4.5	44	600	+ 0.091	0.1	21
MMSZ5256-V-G	M.6	M6	30	4.2	49	600	+ 0.091	0.1	23
MMSZ5257-V-G	M.7	M7	33	3.8	58	700	+ 0.092	0.1	25
MMSZ5258-V-G	M.8	M8	36	3.4	70	700	+ 0.093	0.1	27
MMSZ5259-V-G	M.9	M9	39	3.2	80	800	+ 0.094	0.1	30
MMSZ5260-V-G	M.0	M0	43	3	93	900	+ 0.095	0.1	33
MMSZ5261-V-G	N.6	N6	47	2.7	105	1000	+ 0.095	0.1	36
MMSZ5262-V-G	N.7	N7	51	2.5	125	1100	+ 0.096	0.1	39
MMSZ5263-V-G	N.8	N8	56	2.2	150	1300	+ 0.096	0.1	43
MMSZ5264-V-G	N.9	N9	60	2.1	170	1400	+ 0.097	0.1	46
MMSZ5265-V-G	N.0	N0	62	2	185	1400	+ 0.097	0.1	47
MMSZ5266-V-G	P.6	P6	68	1.8	230	1600	+ 0.097	0.1	52
MMSZ5267-V-G	P.7	P7	75	1.7	270	1700	+ 0.098	0.1	56

¹⁾ The Zener Impedance is derived from the 1 kHz AC voltage which results when an AC current having an RMS value equal to 10 % of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} . Zener Impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

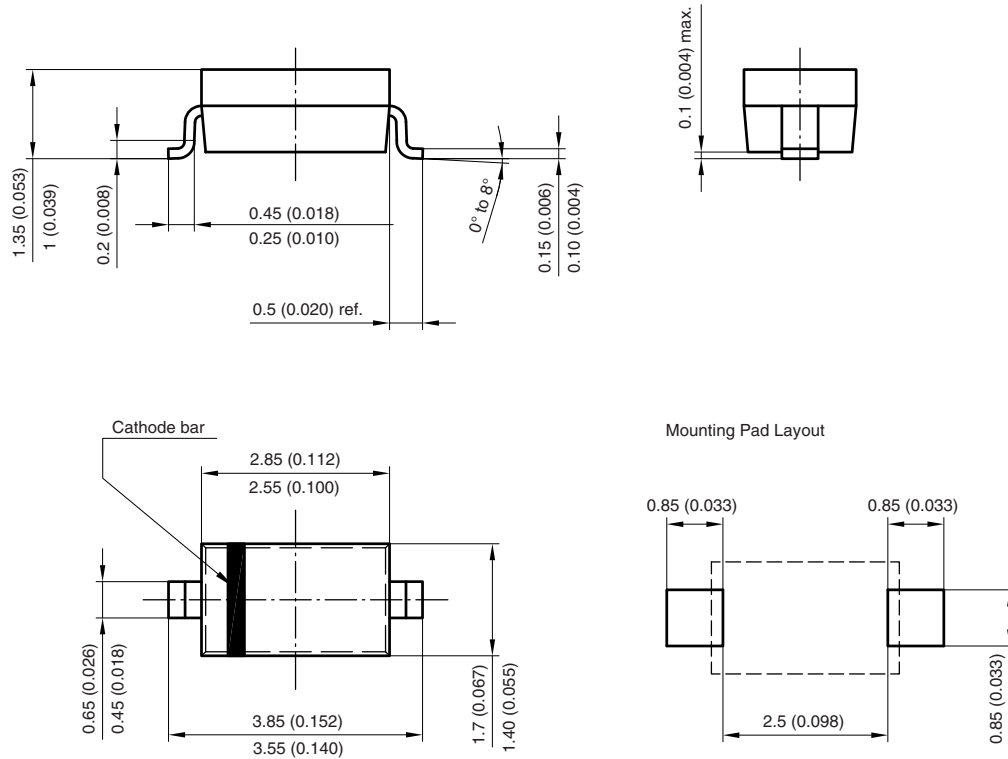
²⁾ Measured with device junction in thermal equilibrium.



MMSZ5225-V-G to MMSZ5267-V-G

Vishay Semiconductors

Package Dimensions in millimeters (inches): SOD-123



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