

Maximum Ratings (@ $T_A = +25^{\circ}C$, unless otherwise specified.)

Characteristic	Symbol	Value	Unit	
Forward Voltage (Note 6)	@ I _F = 10mA	V_{F}	0.9	V

Thermal Characteristics

Characteristic	Symbol	Value	Unit	
Power Dissipation (Note 7)	P _D	200	mW	
Thermal Resistance, Junction to Ambient Air (Note 7)	$R_{ hetaJA}$	625	°C/W	
Operating and Storage Temperature Range	T _{J,} T _{STG}	-65 to +150	°C	

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

_		Zener Voltage Range (Note 8)		Test Current	Maximum Zener Impedance (Note 9)		Maximum Reverse Leakage Current (Note 8)		
Type Number	Marking Code		V _Z @ I _{ZT}		I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK} = 0.25mA	I _R	@ V _R
		Nom (V)	Min (V)	Max (V)	mA	2	Ω	μA	V
MMSZ5221BS	C1	2.4	2.28	2.52	20	30	1200	100	1.0
MMSZ5223BS	C3	2.7	2.57	2.84	20	30	1300	75	1.0
MMSZ5225BS	C5	3.0	2.85	3.15	20	30	1600	50	1.0
MMSZ5226BS	G1	3.3	3.14	3.47	20	28	1600	25	1.0
MMSZ5227BS	G2	3.6	3.42	3.78	20	24	1700	15	1.0
MMSZ5228BS	G3	3.9	3.71	4.10	20	23	1900	10	1.0
MMSZ5229BS	G4	4.3	4.09	4.52	20	22	2000	5.0	1.0
MMSZ5230BS	G5	4.7	4.4 7	4.94	20	19	1900	5.0	2.0
MMSZ5231BS	E1	5.1	4.85	5.36	20	17	1600	5.0	2.0
MMSZ5232BS	E2	5.6	5.32	5.88	20	11	1600	5.0	3.0
MMSZ5233BS	E3	6.0	5.70	6.30	20	7	1600	5.0	3.5
MMSZ5234BS	E4	6.2	5.89	6.51	20	7	1000	5.0	4.0
MMSZ5235BS	E5	6.8	6.46	7.14	20	5	750	3.0	5.0
MMSZ5236BS	F1	7.5	7.13	7.88	20	6	500	3.0	6.0
MMSZ5237BS	F2	8.2	7.79	8.61	20	8	500	3.0	6.5
MMSZ5238BS	F3	8.7	8.27	9.14	20	8	600	3.0	6.5
MMSZ5239BS	F4	9.1	8.65	9.56	20	10	600	3.0	7.0
MMSZ5240BS	F5	10	9.50	10.50	20	17	600	3.0	8.0
MMSZ5241BS	H1	11	10.45	11.55	20	22	600	2.0	8.4
MMSZ5242BS	H2	12	11.40	12.60	20	30	600	1.0	9.1
MMSZ5243BS	H3	13	12.35	13.65	9.5	13	600	0.5	9.9
MMSZ5245BS	H5	15	14.25	15.75	8.5	16	600	0.1	11
MMSZ5246BS	J1	16	15.20	16.80	7.8	17	600	0.1	12
MMSZ5248BS	J3	18	17.10	18.90	7.0	21	600	0.1	14
MMSZ5250BS	J5	20	19.00	21.00	6.2	25	600	0.1	15
MMSZ5251BS	K1	22	20.90	23.10	5.6	29	600	0.1	17
MMSZ5252BS	K2	24	22.80	25.20	5.2	33	600	0.1	18
MMSZ5254BS	K4	27	25.65	28.35	5.0	41	600	0.1	21
MMSZ5255BS	K5	28	26.60	29.40	4.5	44	600	0.1	21
MMSZ5256BS	M1	30	28.50	31.50	4.2	49	600	0.1	23
MMSZ5257BS	M2	33	31.35	34.65	3.8	58	700	0.1	25
MMSZ5258BS	M3	36	34.20	37.80	3.4	70	700	0.1	27
MMSZ5259BS	M4	39	37.05	40.95	3.2	80	800	0.1	30

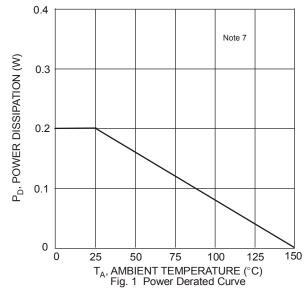
^{6.} Short duration pulse test used to minimize self-heating effect.

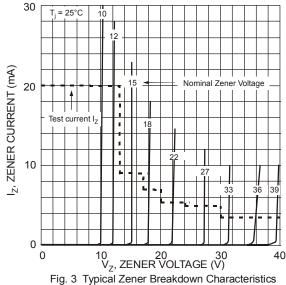
^{7.} Part mounted on FR-4 PC board with recommended pad layout, which can be found on our website at http://www.diodes.com/datasheets/ap02001.pdf 8. Short duration pulse test used to minimize self-heating effect.

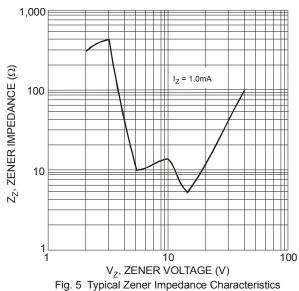
^{9.} f = 1KHz.











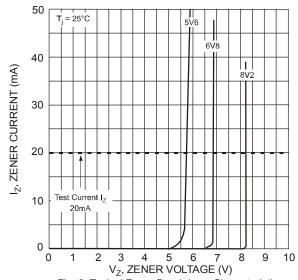


Fig. 2 Typical Zener Breakdown Characteristics

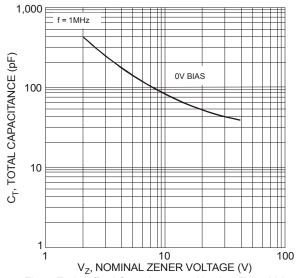
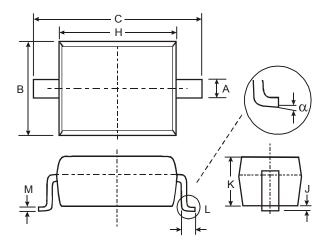


Fig. 4 Typical Total Capacitance vs. Nominal Zener Voltage



Package Outline Dimensions

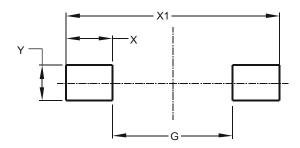
Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for latest version.



SOD323				
Dim	Min	Max		
Α	0.25	0.35		
В	1.20	1.40		
С	2.30	2.70		
Н	1.60	1.80		
J	0.00	0.10		
K	1.0	1.1		
L	0.20	0.40		
M	0.10	0.15		
α	0°	8°		
All Dimensions in mm				

Suggested Pad Layout

Please see AP02001 at http://www.diodes.com/datasheets/ap02001.pdf for latest version.



Dimensions	Value (in mm)
G	1.520
Х	0.590
X1	2.700
Υ	0.450



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