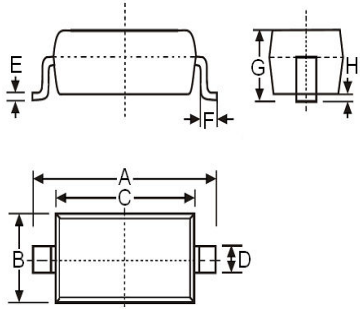
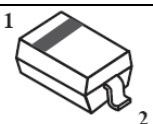



SURFACE MOUNT ZENER DIODE	REVERSE VOLTAGE – 3.0 to 30 Volts POWER DISSIPATION – 0.2 Watts																														
<p>FEATURES</p> <ul style="list-style-type: none"> • Planar die construction • 200mW power dissipation rating • Ultra-small surface mount package <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: SOD-323 Plastic • Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl) • Moisture Sensitivity: Level 1 per J-STD-020D • Lead Free in RoHS 2002/95/EC Compliant 	<p style="text-align: center;">SOD-323</p> <div style="display: flex; align-items: center;">  <table border="1" style="border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="3">SOD-323</th> </tr> <tr> <th>Dim.</th> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr><td>A</td><td>2.50</td><td>2.70</td></tr> <tr><td>B</td><td>1.20</td><td>1.40</td></tr> <tr><td>C</td><td>1.60</td><td>1.80</td></tr> <tr><td>D</td><td>0.25</td><td>0.35</td></tr> <tr><td>E</td><td>0.08</td><td>0.15</td></tr> <tr><td>F</td><td>0.25</td><td>0.40</td></tr> <tr><td>G</td><td>---</td><td>1.0</td></tr> <tr><td>H</td><td>0.00</td><td>0.10</td></tr> </tbody> </table> </div> <p style="text-align: center; font-size: small;">Dimensions in millimeter</p>	SOD-323			Dim.	Min.	Max.	A	2.50	2.70	B	1.20	1.40	C	1.60	1.80	D	0.25	0.35	E	0.08	0.15	F	0.25	0.40	G	---	1.0	H	0.00	0.10
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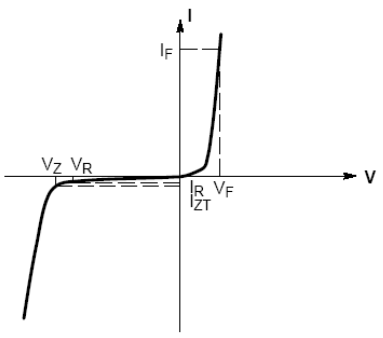
Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage @ I _F =10mA	V _F	0.9	V
Power Dissipation	P _D	200	mW
Thermal Resistance, Junction to Ambient	R _{θJA}	625	°C/W
Operating Temperature Range	T _J	150	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

Device Marking :

Device P/N	Marking	Pin Diagram	Equivalent Circuit Diagram
MMSZ52XXBS	XX=Specific device code (See below table)		

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Symbol	Parameter	
V _Z	Reverse Zener Voltage @ I _{ZT}	
I _{ZT}	Reverse Current	
Z _{ZT}	Maximum Zener Impedance @ I _{ZT}	
I _{ZK}	Reverse Current	
Z _{ZK}	Maximum Zener Impedance @ I _{ZK}	
I _R	Reverse Leakage Current @ V _R	
V _R	Reverse Voltage	
I _F	Forward Current	
V _F	Forward Voltage @ I _F	

Device	Device marking	Zener Voltage				Maximum Zener Impedance		Maximum Reverse Current	
		VZ@IZT			IZT	ZZT@IZT	ZZK @IZK=0.25mA	IR @VR	
		Nom	Min	Max	mA	Ω	Ω	μ A	V
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	4.47	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
MMSZ5244BS	H4	14	13.3	14.7	9.0	15	600	0.1	10
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

REV.4, Apr-2011, KSJR13

Notes:

1. Device mounted on ceramic PCB; 7.6mm x 9.4mm x 0.87mm with pad areas 25mm².
2. Tested with pulses, Tp≤1.0ms.

MMSZ52xBS Series Typical Characteristics

Fig.1 Power Derating Curve

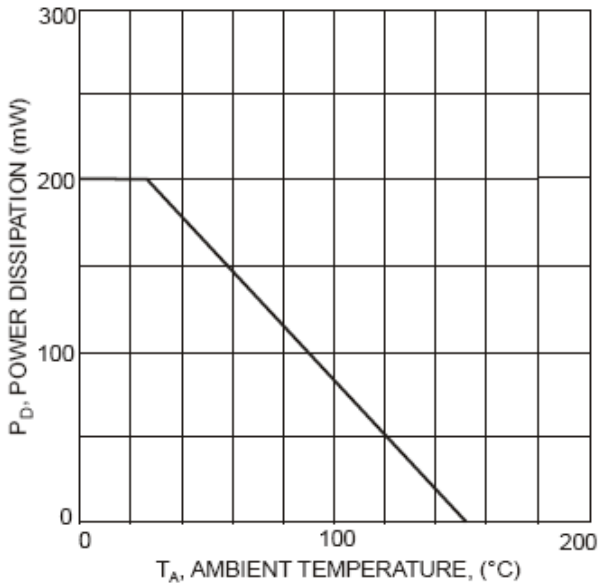


Fig.2 Typical Zener Breakdown Characteristics

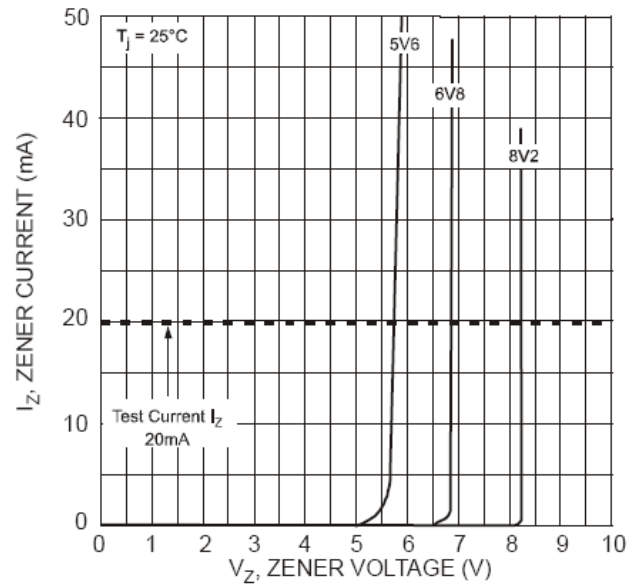


Fig.3 Typical Zener Breakdown Characteristics

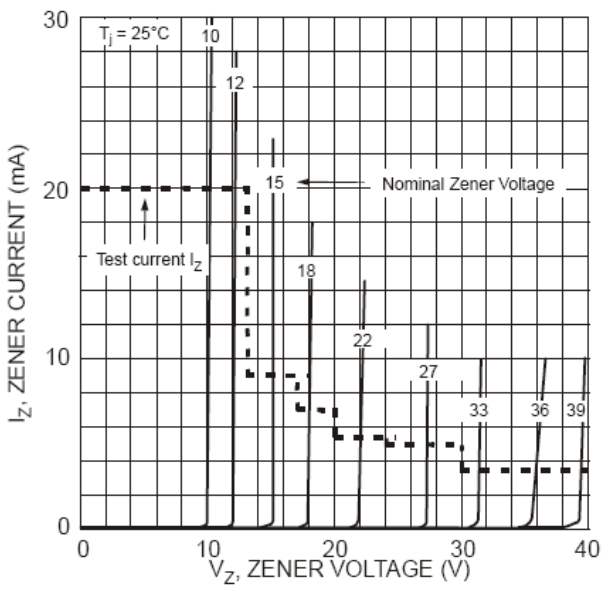
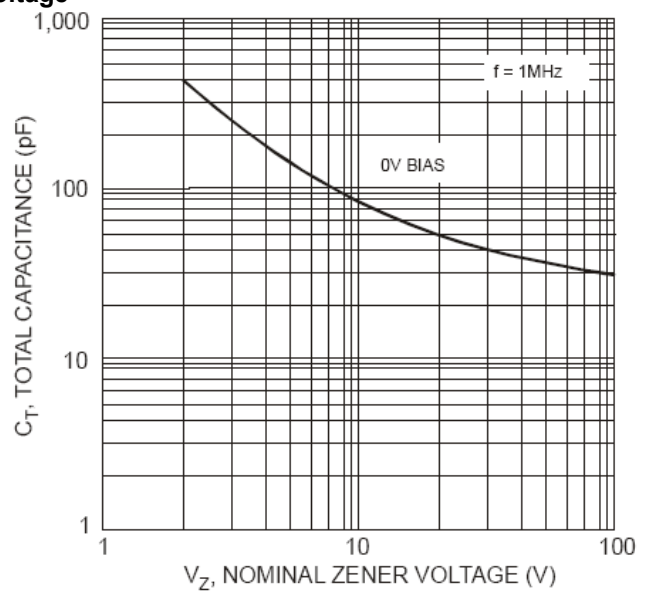


Fig.4 Typical Total Capacitance vs. Nominal Zener Voltage



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